

What is willpower?

A qualitative exploration of how people struggling
to lose weight understand the term

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ABSTRACT

Obesity is associated with serious physical health problems. People often attribute being overweight to low willpower. However, the meaning of the term ‘willpower’ has gradually changed and is contested amongst academics. Research using qualitative approaches to explore how people understand willpower is limited, but unquestioned understandings about willpower might obstruct efforts to effect change.

Using a purposive sampling approach, 16 customers from Slimming World (a UK-based weight loss organisation) were recruited to participate in semi-structured interviews. Questions were asked about their understandings of willpower and how it influences their wellbeing. Thematic analysis was applied to the data. Five main themes with accompanying subthemes were identified. Participants conceptualised willpower in various ways (e.g. as matter of habit or routine or as a mindset/mentality) and viewed it as influenced by external and internal factors (e.g interpersonal context, the presence of tempting cues, deprioritising one’s goals). They saw willpower as a desirable trait, but their responses were in some ways contradictory (e.g. they drew upon various conceptualisations of willpower and thought it central in causing unhealthy weight despite recognizing many other causal factors).

With its strong emphasis on personal experience, this project provides an alternative narrative about what willpower is and how it operates to those provided by academic models. The project particularly emphasises the need for doubt and uncertainty about the concept of willpower and the findings call for more precise definition of willpower and how it differs from self-control. Implications for further research are also discussed as are the ways in which the findings might facilitate clinical work in various ways. Their relevance to assessment, engagement, formulation, treatment planning and intervention are described in detail.

CHAPTER 1: INTRODUCTION

1 Overview

In this thesis I try to achieve a better understanding of how people trying to lose weight understand the term ‘willpower’. This is important an area to study, given the confusion about what willpower means. The relationship between unhealthy behaviours such as overeating and low willpower seems taken for granted by many as central, but the term is worth examining as an explanation for such behaviours. Unquestioned understandings of what willpower is might leave clinicians with little flexibility or ability to introduce different perspectives when meeting people who say they lack willpower and might obstruct efforts to effect change within and outside clinical services. I therefore interviewed a group of volunteers from Slimming World. By analysing the data gathered from these semi-structured interviews to identify themes within participants’ responses, I make available their assumptions about willpower. This research should therefore add to existing research focusing only on the psychological workings of willpower using quantitative approaches (e.g. measuring the effects of high versus low willpower or of understanding willpower as limited versus unlimited or as something that is fixed versus something that can be improved).

I chose this topic because I have been interested in willpower since encountering the work of Roy Baumeister (discussed below). At the time (around 10 years ago) I found it convincing and helpful. I also felt my own willpower fluctuated. I was interested in researching whether clinicians had been influenced by Baumeister’s work as it seemed to have been popularised in publications such as *Men’s Health*, *The Daily Mail*, *The Guardian* as well as popular psychology books on willpower, on decision-making (Kahneman, 2011) and concentration (Newport, 2016). However, exploring the literature, it became apparent

that the construct of willpower had in some ways been uncritically and unquestioningly accepted, that it was poorly defined and that no research had been undertaken to explore how lay people understand the term.

The first chapter of this thesis introduces and provides a rationale for the project. The next describes the methods adopted in gathering and analysing data to identify themes. The third chapter describes the results – the themes participants spoke about when discussing willpower. The final chapter discusses the strengths and weaknesses of the research and its implications for research, theory and clinical practice.

This introduction begins by discussing definitions of willpower and literature suggesting that people use the term to account for health-related behaviours and for weight loss specifically, followed by a discussion of the relevance of willpower to weight loss. It then describes different ways of conceptualizing willpower, how these conceptualizations might relate to other constructs and theories used to account for behaviour change, and provides a general critique of the concept of willpower. I then discuss how a person's theories of willpower might influence their lives, critically review the literature that investigates how people understand willpower and then provide a rationale for the project and the aims of the research.

2 Definitions of willpower

Colloquially, the terms 'willpower' and 'self-control' are often used interchangeably, suggesting confusion between the two. For example, the American Psychological Association (APA) published a report as part of their Mind/Body Health campaign (aimed at the public), called 'What you need to know about willpower: The psychological science of self-control' (APA, 2012). The terms willpower and self-control were used synonymously

within it. Likewise, the terms are at times used synonymously in academic literature. For example, Gaillot et al. (2007) published an article entitled ‘Self-control relies on glucose as an energy source: Willpower is more than just a metaphor’. Duckworth and Kern (2011) state that self-control is also known as “self-regulation, self-discipline, willpower, effortful control, ego strength, and inhibitory control, among other terms” (p.260). They go on to say “Several authors have noted the challenge of defining and measuring self-control ... and its converse: impulsivity or impulsiveness (e.g., Depue & Collins, 1999; Evenden, 1999; White et al., 1994; Whiteside & Lynam, 2001)” (Duckworth and Kern, 2011, p.260).

Inzlicht, Berkman and Elkins-Brown (2016) stated that “Self-control, known colloquially as willpower, refers to the mental processes that allow people to override any of their thoughts, emotions, or behaviours that compete with their overarching goals” (p.101). Similarly, the APA (2012, p.2) described willpower as the “ability to resist short-term temptations in order to meet long-term goals.” Baumeister, Vohs, and Tice (2007) described something similar, when they described self-control as a “capacity for altering one’s own responses, especially to bring them into line with standards such as ideals, values, morals, and social expectations, and to support the pursuit of long-term goals” (p. 351). If willpower can be taken as a synonym for self-control, this would then constitute an additional definition. Given the similarity and that these definitions of willpower could equally apply to self-control it is inevitable that the two concepts might be confused with one another.

Willpower and self-control could be distinct but related in that willpower may be required for self-control and without it self-control may be difficult. Perhaps self-control relates to actual performance while willpower relates to one’s capacity to perform, so that consequently, people with high willpower can exert self-control more often and for longer than people with less. If this is true, however, an intellectually dissatisfying logic seems to operate, taking the form: “How does she show such self-control? Because she has willpower.

But how do we know she has willpower? Because she shows self-control”. And if the proposition that willpower and self-control are different is false, this logic then becomes increasingly circular (“How does she show such self-control? Because she has self-control”).

Kugelman (2013) traced the changing significance of the term willpower in different times and contexts from the 1850s onwards and identified a diverse set of meanings associated with that term including (i) a form of energy, (ii) resoluteness and effort, (iii) the testing of the limits of endurance, (iv) an ability to influence and lead others, (v) a sign of good character, and (vi) a goal of education and training. He argued that whatever the definition, willpower is a commonplace way of interpreting and appraising actions. However, he also stated that “It has never taken on a definition distinct from the vernacular” (p.494) which may be why he concludes that “Qualitative research will enrich our understanding of willpower” (p.479).

Despite the difficulties in defining willpower, it seems reasonable to say that references to it in popular literature grow while in academic literature it is alluded to and used carelessly while the term ‘self-control’ is more common. This project assumes willpower and self-control are distinct, that willpower (or some other psychological characteristics or processes) might be required for acts of behavioural or mental self-control and because, if willpower and self-control are assumed to be the same thing, lay accounts (discussed below) of what lies behind self-control (i.e. willpower) are invalidated.

In the following section, I describe different ways in which willpower has recently been conceptualised. It should be noted that no academic articles describing the difference between willpower and self-control seem readily available.

3 The ubiquitous use of willpower to explain various health related behaviours and outcomes

People have used the term ‘willpower’ to explain behaviours for decades (Baumeister & Tierney, 2012; Kugelman, 2013) and across diverse geographical locations. Kugelman (2013) suggests the idea of willpower is closely connected to American culture and linked with ideals of personal achievement as opposed to group harmony and interests. However, the literature search described below identified research conducted in different countries indicating that the public and healthcare professionals (HCPs) alike believe willpower levels influence people’s behaviours and/or health outcomes suggesting it is not only an American concept. A detailed review of these surveys is beyond the scope of the discussion but at least eight articles (surveying people from Oman, Saudi Arabia, Kuwait, Denmark, UK, France, Belgium, Hungary, Netherlands, Iceland, Australia, and Canada) can be identified, suggesting the commonplace use of the term and its meaningfulness to various populations.

In this introduction I will appraise research that has analysed accounts from people about their health or health-related behaviours and that included high or low willpower as an explanation for these behaviours. This focus assumes that interviews have advantages over surveys, in that they allow respondents to answer more freely and in more detail without responses being constrained by multiple choice questions. They also allow interviewers to explore their answer further, to question respondents’ understandings and interpretations and to gather enough information to make judgements about the validity of responses. Reviewing these articles is important for the purpose of this project, given their abstracts indicating that people around the world commonly use the term willpower. The purpose of discussing these articles (several of which are about weight loss) is to demonstrate that willpower is an explanatory term seen as important by people from diverse cultures when referring to behaviours influencing health.

For example, Shangase, Tsoka-Gwegweni and Egbe (2017) conducted in-depth interviews with South African adults with drug resistant tuberculosis (n=20) to identify barriers to smoking cessation. Participants' ages ranged from 18-70 years old (no average was given). Thematic analysis was used to analyse the data but minimal description of the method was given. Non-addiction related barriers highlighted by the analysis were designated as sub-categories of 'personal factors'. This contrasted with 'institutional factors' (e.g. lack of activities when admitted to hospital or no access to smoking cessation interventions). This partitioning of non-addiction, addiction and institutional related barriers suggests little thought about the interplay between context and behaviour. Although their findings (one of which was identifying lacking willpower as a barrier to smoking cessation) seem credible and coherent in some ways, the authors seem not to have asked their participants to explain that term (it could mean different things to different people) and, for some reason, the authors classified lacking willpower as a 'non-addiction' related barrier. Furthermore, no practical suggestions followed from this finding.

Petersen, Friis, Haxholm, Nielsen and Wind (2015) interviewed twelve mental health service users living in supported housing in Denmark to identify barriers and facilitators to recovery. Participants' ages ranged from 21 to 57 years (mean age of 35). The data were analysed using a "descriptive phenomenological method of text analysis ... followed by a hermeneutic interpretation" (p.3). Little further detail was provided so the authors' meaning is unclear. Noteworthy, ten participants were interviewed twice, suggesting a deeper level of exploration and understanding. The authors also seem to have been relatively stringent in building credibility checks into their analysis. Although faulting this article was difficult, the conclusion of this article that willpower influences service users' recovery was not followed by any discussion of treatment or policy implications in relation to how willpower might be bolstered (other than social support being mentioned).

Martinez-Ramos et al. (2015) gathered qualitative data from 23 overweight or obese primary care patients in Spain using focus groups and interviews to explore their attitudes to sedentary behaviour, to changing this behaviour, and the factors facilitating or blocking such change. Participants were aged from 25-64 (average age 52 years). The researchers used thematic analysis on their data. However, they described their research methods in minimal detail, with no discussion of quality control, or any signs of good research practice and each finding was substantiated with limited quotations from participants (but this is often the case in journal articles). This article provided no insight into how people understand or explain the term 'willpower' and it was undefined. However, the account and results provided by the authors seem convincing and they concluded that a lack of willpower was one barrier, among many, to reducing sedentary behaviour. Interestingly, when Martinez-Ramos et al. asked their participants how primary healthcare workers could help them spend less time sitting, participants did not ask for support with willpower, suggesting they did not perceive this as appropriate for discussion in primary healthcare. The authors made no suggestions as to how willpower might be fostered.

Barberia et al. (2008) used semi-structured interviews to gather information from 17 Spanish obese and overweight women enrolled in a weight loss treatment programme. Their age ranged from 29 to 51 years (average age was 41). The researchers aimed to understand participants' beliefs about behavioural control of eating behaviours. The data was analysed using a variant of grounded theory. The strength of this article is the researchers' efforts to seek deviant cases and asked two participants and the staff nurse responsible for their treatment, to check the validity of the findings. However, the method was described in minimal detail, would be difficult to replicate and the interview questions were not provided. Like Martinez-Ramos et al., the article provided no insight into how people understand or explain the term willpower and it was undefined. In concluding, the researchers found that

the most frequently reported barriers to dieting were lack of willpower and having to cook. Interestingly, rather than suggesting targeting willpower itself, they suggest such beliefs might be usefully targeted as eating behaviour change interventions.

Reilly et al. (2018) gathered information from 14 university staff members in Ireland using focus groups to understand the attitudes, behaviours, motivations and strategies of those maintaining their weight within a normal range. Interviews were also conducted with an additional 3 participants. Participants ages ranged between 32 and 60 years (average of 46 years) and the sample was divided into those who had a healthy weight, those who had lost more than one stone in weight and maintained weight loss over a year and those considered overweight and unable to achieve or sustain weight loss. The data were analysed using thematic analysis, the detail of which was only alluded to by referencing other sources. With regards to strengths, transcripts were shared with participants to see if they reflected their intended meaning and authors describe the themes as being mutually developed with the participants. With regards to problems and limitations, whether group processes and dynamics within the focus groups influenced the material gathered was undiscussed. Group conformity, splitting, or one person dominating a discussion might have influenced the data. The focus groups were facilitated by a 'trained interviewer' but his/her abilities to steer the groups effectively was unclear. How the researchers may have influenced the material given by participants was undiscussed. One sub-theme was that willpower was considered by participants to be integral to weight maintenance and loss, but it was unclear why this sub-theme was separate to that of 'determination', why it was not subsumed under the theme of 'motivational influences' and how willpower differs from them. The authors suggest psychological therapies might benefit people with low willpower. However, there was no discussion of what willpower actually *is*.

In a larger study, researchers from Maastricht (Nauta, Hospers, Jansen & Kok, 2000) undertook semi-structured interviews with 74 obese women (aged from 21 to 49 years, average age 38.3 years), half of whom met criteria for Binge Eating Disorder. They aimed to examine the frequency and content of their cognitions to investigate the relationship between cognitive content and binge eating in an obese population. The data gathered was analysed using content analysis. Three raters (experienced therapists) independently categorised cognitions into different groups for the analysis (with high reliability). However, they classified the cognitions elicited during interview only by their believability to participants, meaning the effects of cognitions occurring more frequently or lingering for longer were ignored. Strength of belief in a particular thought about oneself (which was rated by participants using visual analogue scales) was taken by researchers to be an unchanging quality, but this is questionable. The top three cognitions rated as most believable by each participant were analysed, but why only three was unspecified, ignoring a possible cumulative effect of other cognitions that may be less believable but higher in frequency. Based on a model developed by Aaron T. Beck (the founding father of cognitive therapy) published in 1976 cognitions were categorised as either negative automatic thoughts or self-related schema, but this dichotomy ignores other types of cognition. The attempts by the researchers to mathematise thinking seemed spurious and there was no discussion of the limitations of the study. However, the logic of the research is difficult to dispute as too are the two conclusions - that participants generally felt they lacked willpower and that non-binge eaters mentioned this more than binge eaters. However, again there was not discussion or definition of what willpower might actually be

Despite their limitations these articles support the statement that “willpower persists as the most common, if least illuminating, lay term for self-control” (Duckworth et al., 2016, p.5). People in various settings seem to often use the idea of willpower to understand and

explain why they do or do not do the things they feel they should. Yet the paucity of recommendations for treatment or of policy that might directly target low or absent willpower in these articles suggests the findings facilitate little understanding and explanation as to what willpower is and the need for better understanding and explanation of the concept and, indeed, the meaning of the word was left unexplored. It might therefore be helpful for researchers to make their description of willpower more precise, clarify how it differs from self-control, continue to try understand better the mechanisms behind it and to be more explicit about the practice and policy implications of their research.

4 Willpower and weight loss

Obesity is widely acknowledged to be associated with a range of serious physical health problems (discussed in Ogden, 2010). “The Health and Social Care Information Centre reported that in 2011/12 there were 11,740 inpatient admissions to hospitals in England with a primary diagnosis of obesity ... In the UK obesity rates nearly doubled between 1993 and 2011 ... The cost of being overweight and obese to society and the economy was estimated to be almost £16 billion in 2007 (over 1% of gross domestic product)” (National Institute for Health and Care Excellence (NICE), 2014, p.5). Clinical psychologists with expertise in behaviour change and weight management can help prevent and provide interventions for obesity. An extensive review of the literature identifying the causes of obesity is beyond the scope of this project. However, in their ‘Psychological Perspective on Obesity’ report, The British Psychological Society (BPS) state that “Only a biopsychosocial approach can account for the fact that individuals and environments both have an important role to play in the development of obesity and influence each other” (2019, p.12). The biological factors the BPS discuss are genetic influences (e.g. appetite control

genes) and also responses to stress. The social and environmental factors they identify are food choices and availability, physical activity and sedentary behaviour, access to facilities and neighbourhood, social and economic status, early life nutrition and popularly held beliefs about obesity (e.g. weight stigma). The psychological influences identified are eating behaviours, responsivity to food cues, emotional eating, mental health problems, the impact of psychological adversity, coping skills and beliefs. With regards to willpower, the BPS state that "...obesity is not simply down to a person's lack of willpower" (2019, p.9) but also (without discussing further) that people and policy makers frequently attribute obesity to low willpower or self-discipline. Additionally, they state that HCPs can stigmatize people living with obesity for various reasons, including lack of willpower and self-control, and that experiencing stigma from HCPs can be linked to weight gain, psychological stress and reluctance to request treatment.

Literature reviews pertaining to physicians, dietitians/nutritionists, and physiotherapists support the BPS's assertion that HCPs often attribute obesity to low willpower. Another literature review reported evidence that nurses attribute obesity to low self-control (a word often used synonymously with willpower, as discussed). These articles will now be discussed (in chronological order) and cited.

Brown (2006) published a systematic review of 11 articles to understand nurses' attitudes towards adult patients who are overweight and obese. Eight articles used a self-report quantitative survey design (two involving British participants, two involving Canadian participants and four involving North American participants) and three used qualitative designs (two of these involved British participants and one North American participants). Sample sizes were unspecified. The search terms used to identify articles seemed comprehensive, and the quality of the papers reviewed by Brown were evaluated (but without a critical appraisal tool). Brown reported that two studies concluded that nurses view

overweight and obese people as lacking self-control (although the proportion of which was unstated). The remaining five studies were not reported as having findings related to self-control. He concluded that the little research available suggests that a proportion of nurses have negative attitudes towards people who are overweight/obese.

Dixon, Hayden, O'Brien and Piterman, (2008) published a generic literature review (i.e. only findings were reported and the literature was not evaluated in any way) of 43 articles about physician attitudes, beliefs, knowledge and barriers towards overweight and obese adults. The size of the samples ranged from 21 to 12,835. Noteworthy, when searching databases for literature, their search terms were rather narrow (e.g. terms such as views, understandings, prejudices could have been searched instead of just attitude(s)/belief(s)/bias, etc.). Two articles described obese patients' perceptions of their physicians' attitudes and may therefore have been better excluded. The authors concluded that physicians believe overweight and obese patients lack willpower, although this claim was not quantified in terms of proportions.

Jung, Luck-Sikorski, Wiemars and Riedel-Heller (2015) reported a systematic review of eight articles to ascertain the degree to which obese people are stigmatized by dietitians. Three only recruited student dietitians who might have different views to practicing dietitians, a proportion of which may not have gone on to practice. Five articles involved American participants, two involved British and one involved German participants. Sample sizes ranged from 49 to 1130. The narrowness of their search terms was noteworthy (e.g. terms such as bias, assumptions, views, attribution and explanation were not searched) perhaps explaining the small number of articles included in their review. Although the team described their review as systematic, the quality of the papers reviewed was undiscussed. Two of the included studies had findings unrelated to willpower. However, five concluded that many dietitians implicated a lack of willpower in causing obesity. For two of these

articles, the proportion of participants doing so was given (47.4% and 41.0%) but in the remaining three articles it was not. They concluded that six of the studies reported prejudice by dietitians towards people with obesity and four suggested dietitians see obese people as being responsible for their own weight and health conditions.

Cavaleri, Short, Karunaratne and Chipchase (2016) described a systematic review of seven articles (five quantitative, one qualitative and one used mixed methods) to ascertain physiotherapists' thoughts or behaviours towards overweight people. Four articles involved Australian participants. The remainder had participants from South Africa, USA and Canada. The search terms used to identify articles seem comprehensive. Using an appraisal tool, the authors assessed all the articles included as being of high quality. Two studies reported that physiotherapists identified a lack of willpower as a cause of obesity and a third study reported 51% of physiotherapists as describing people with high BMI as being 'weak-willed'. The remaining studies reported findings unrelated to willpower. The authors concluded that all the studies indicated either implicit or explicit stigma amongst physiotherapists towards overweight/obese people.

These reviews therefore suggest that some HCPs view low willpower as causing and/or maintaining excess weight. Members of the public seem to hold similar views. For example, Sikorski et al. (2011) reported a systematic review of seven articles looking at the public's views of overweight or obese people and to what causes they attribute obesity. Six involved participants from the USA, and one participants from Germany. Sample sizes ranged from 909 to 2250. The search terms used to identify articles seemed comprehensive, but the words 'stereotype', 'understandings' and 'views' were excluded. The quality of the papers reviewed was not systematically evaluated. Two of these articles suggested that lay people view lack of willpower as a cause of excess weight and obesity. The proportions of participants expressing this view were 65% and 59%. Four of the remaining articles used

data-collection instruments not designed to detect attributions of excess weight to low willpower, one was written in German, while the last article included items on willpower only as part of a broader set of questions about stigmatizing attitudes towards obesity (23.5% of participants were reported as showing such attitudes). The authors concluded that the public more frequently attributes obesity to internal causes but acknowledges the multiple cause of obesity and that the prevalence of stigmatizing attitude is “rather high” (p.6).

Similarly, the APA ‘Stress in America’ survey (2009, 2010, 2011) thrice reported ‘lack of willpower’ as a reason consistently given for people not making lasting lifestyle and behaviour changes (e.g. losing weight, saving money, exercising). In the 2009 survey, 33% of participants (n=1568) gave this reason, followed by 29% in the subsequent survey (n=1134) and 27% in the 2011 survey (n=1226). In the 2010 survey, respondents described how they would define willpower; “self-control/resisting temptations/urges, sticking to a decision and accomplishing a goal” (APA, 2010, p.13). They also described what would help improve their willpower. These included increased confidence in ability to make changes, increased time, energy and/or money, flexibility in work schedule and help from a professional. In the 2011 survey, respondents defined lack of willpower in various ways including being easily tempted, being unmotivated or not caring enough, lacking discipline, organisation, energy, etc. (APA, 2011). In the 2009 survey, women (37% versus 28% for males) were more prone to reporting lacking willpower to make changes recommended by healthcare providers (APA, 2009). The APA’s findings should be taken with caution given that they were not published in peer reviewed journals but rather by the APA themselves as ‘reports’ and that the reliability and validity of their questionnaire items was undiscussed. In addition, participants responded to multiple choice questionnaire items, meaning their responses were shaped and constrained by the researchers’ presuppositions. Nonetheless, the size of these surveys is impressive and the consistency of their findings is relevant.

Notwithstanding possible differences between the constructs of willpower and self-control, these findings contrast with those from a meta-analysis by de Ridder et al. (2012) of 102 studies (N=32,648) on the behavioural effects (across a variety of domains) of self-control as measured by three different self-report measuring instruments. Their work is difficult to fault (the literature search and study selection process both seemed systematic and reproducible, the authors describe assessing the quality of the studies, publication bias was assessed, etc.) and the authors report a small to medium relationship between self-control and a diverse set of behaviours. However, contrasting with the APA surveys, the authors reported that the effects of self-control on eating and dieting are small. Interestingly, they suggest behaviours that are (partly) regulated by biological regulatory mechanisms (e.g. eating) may be less influenced by self-control than those influenced more by external or social influences (e.g. work).

The concept of willpower is in some ways useful. It helps people make sense of themselves, gives a sense of agency, strength and independence and hope that we can summon up a special quality from within when needed. The idea of willpower can also help bolster self-esteem by allowing us to attribute successes to our own willpower rather than to external factors. Many seem comfortable saying they lack willpower (Dr Frank Ryan, personal communication, 2019) perhaps because this admission allows them to feel more justified in their actions.

However, attributing excess weight/obesity to low willpower might also have negative implications. Firstly, it may sometimes be ethically problematic (i) to allow users of clinical services and their family/friends to possibly misinterpret or oversimplify themselves and each other in this way (especially in families or care systems where there may be high expressed criticism, hostility and efforts to control those seemingly blamed for lacking willpower) and (ii) for clinicians to accept service-users' descriptions of themselves as

lacking willpower as entirely valid statements about their difficulties, given the apparent disagreement about what this term means. If a therapist or service-user were to attribute obesity to low willpower, the problem could be rendered as a personality trait or as being caused by some missing inner quality and thus as something internal, pervasive and permanent (as opposed to external, specific and transient). Attributing obesity to willpower also means that efforts by service users (and potentially clinicians) to effect changes may sometimes be misplaced, confused and/or sub-optimal. Resources may be wasted on ineffective therapy and/or overweight people may not even seek support in the first place if they wish instead to somehow find through their own efforts the willpower to lose weight.

There are also implications that follow from attributing obesity to lack of willpower in relation to body-image and self-esteem. Arguably, doing so may imply that having willpower is normal and desirable and that lacking willpower is abnormal, unattractive or deviant. The concept of willpower supports standards and norms and thereby also the ways in which people understand and treat themselves and their bodies. Although being overweight is clearly recognised as being unhealthy, the idea that willpower might encourage successful weight loss on slimming programmes also encourages conformity to culturally sponsored body-shape ideals that may be most beneficial to the beauty and diet industries. The concept of willpower arguably reinforces “control of meaning, language and ‘agendas’, so that certain issues or groups may be held back from public scrutiny or people may be brought to see their interests and wants in particular ways ... [as well as] power to create beliefs or stereotypes about particular groups, to interpret your own or others’ experience, behaviour and feelings and have these meanings validated by others, and the power to silence or undermine” (Johnstone et al., 2018, p.95).

5 The contested nature of willpower in academia

Willpower has recently been conceptualized by academics in at least three different ways, which I now discuss briefly. A critical discussion of the literature describing, supporting or challenging these models is beyond the scope of this thesis, as it focuses on lay and not academic theories of willpower. However, I include these descriptions to highlight disagreements about definitions of willpower as this helps provide a rationale for this project. The models I outline below describe willpower as (i) a muscle, (ii) a value-based choice, and (iii) a set of micro-skills. However, it should be noted that an important and influential model of willpower (the dual-processing model) has been developed by Walter Mischel (e.g. 2014). It is not discussed, since the purpose of this section is not to provide a comprehensive account of contemporary models of willpower, but rather to show that the nature of willpower is contested.

5.1 Willpower as a muscle

Willpower has been described as a finite resource of energy that allows people to engage in effortful activities (Baumeister & Tierny, 2012). This is based on observations suggesting that when people exercise self-control, undertaking effortful or strenuous activities or restraining their desires or impulses over a period of time, their resource of willpower diminishes and they enter into a state of willpower or energy depletion (also known as ‘ego depletion’). When in this state people have reduced ability to show willpower to engage in similar additional tasks. Baumeister (2012) and others claim that the amount of willpower we have increases if we use it repeatedly, like a muscle, growing stronger with exercise and that it also tires after use and needs to recover. In research using this conceptualisation of willpower, willpower levels are inferred by performance on difficult

tasks (e.g. holding one's hand in a bucket of iced water, resisting delicious food, or persisting with difficult problems).

There is disagreement regarding whether the 'ego depletion' phenomenon is real and replicable (for example, Carter & McCullough, 2013 and 2014; Carter, Kofler, Forster, & McCullough; Cunningham & Bauemeister (2016); Friese, Loschelder, Gieseler, Frankenbach & Izlicht (2018); Hagger & Chatzisarantis (2014); and Hagger, Wood, Stiff & Chatzisarantis (2010)). Evidence (discussed further in section 8) also suggests that experiences of 'ego depletion' may depend as much on personal beliefs about willpower (e.g. whether it is finite or not) as on willpower itself.

5.2 Willpower as a value-based choice

Willpower has also been understood using a value-based choice model that incorporates affective and cognitive processes (e.g. Inzlicht & Schmeichel, 2012; Inzlicht, Schmeichel & Macrae, 2013; and Inzlicht et al., 2016). According to this model, the experience of having to exert something that might be termed 'willpower' to control behaviour may be misleading. Instead, acts of willpower are conceptualised as acts of decision-making. Rather than regarding willpower as a phenomenon in its own right, this model postulates that the subjective experience of using willpower (accompanied by feelings of effort, exertion or conflict) disguises the making of a decision like any other. These decisions (which cause feelings of using willpower) are driven by the same processes thought to underlie other decisions. So-called acts or lapses of willpower are driven by a complex evaluation of the costs and benefits of available options, integrating these attributes (such as rewards, punishments, perceived effort costs, perceived error costs, acceptance or rejection, changes in status, accrual of resources, coherence, consistency etc.) into a collective, unified

value signal for each option and then enacting the option felt/estimated as most valuable when the decision is made.

This model therefore suggests that so-called lapses of willpower are in fact decisions to disengage from tasks that require effort. Tasks requiring self-restraint or self-control (e.g. continuing with strenuous exercise) are inherently aversive. People tend to avoid doing difficult things unless they serve a clear purpose. Thus, as effort is expended, aversive feelings build and intensify causing an evaluation as to whether the end goal warrants hard work and discomfort. As the disparity between the predicted outcome and the current aversive feelings increases, motivation to expend further effort wanes. The opposite happens for motivation to do things that might reduce aversion (e.g. comfort eating or stopping strenuous exercise) and that might bring about immediate gratification (Dang & Hagger, 2019).

In the ‘willpower as value-based choice’ model, attention can be seen as influencing the decision-making process by magnifying or diminishing relevant elements. The sense of effort and conflict that can be interpreted as using willpower emerges from the decision-making process itself. When some options are evaluated as costly and aversive (although important in the long term), these options are more readily discounted. From this perspective, the term ‘willpower’ potentially mislabels the cognitive and affective processes involved in decision-making processes and outcomes. The model implies the term ‘willpower’ reifies a complex set of computations and that it might be better seen as a convenient and simple but potentially misleading explanation.

5.3 Willpower as a set of micro-skills

Willpower has also been conceptualised as a set of micro-skills that, if deployed in sufficient numbers or often enough, give rise to the appearance of someone having willpower

(e.g. Marlatt & Donovan, 2005; Duckworth, Gendler & Gross, 2016). From this perspective, the appearance of possessing willpower is created by acquiring the skills and strategies allowing regulation of behaviour more effectively than others do. Thus, from this perspective, the successful use of coping behaviours (e.g. avoiding temptations in the first place, rehearsing how to respond helpfully when faced with temptation or if succumbing to it) leads to the attribution of willpower and not willpower itself.

6 The relationship of willpower to other theories and constructs related to behaviour change

This section aims to compare and contrast the construct of willpower with others associated with behaviour change so that this project might relate to other behaviour change literature. It can be inferred from the descriptions of the three different models of willpower described in section 5 that it differs from other related constructs implicated in influencing behaviour and behaviour change. Fully discussing the 83 different theories of behaviour change in the compendium by Michie, Campbell, Brown, West and Gainforth (2014) is not possible within the constraints of this project. However, Davis, Campbell, Hildon, Hobbs and Michie (2015) identified 82 different theories of behaviour change in their scoping review, and Table 1 compares and contrasts the three models of willpower with the five accounts of behaviour change those authors identified as being reported most frequently in the 276 articles they reviewed. This review also compares willpower with some key constructs implicated in behaviour change (self-efficacy, intention, motivation and volition). I will briefly describe those five theories of behaviour change (in alphabetical order), inevitably oversimplifying in the process.

The transtheoretical/stages of change model (e.g. Prochaska, DiClemente & Norcross, 1992; Prochaska, Norcross & DiClemente, 2013) suggests that behaviour change involves a series of progressive stages and that behaviour change strategies should match the stage of change a person is in. At the pre-contemplation stage, change has not been considered while at the following stage (contemplation) the person begins considering change. Behaviours associated with the preparation, action and maintenance stages match the names of these stages (preparing for change, acting, and maintaining change respectively).

The theory of planned behaviour (Ajzen, 1991) suggests there is an interplay between perceived behavioural control, perceived norms and a person's attitude towards the behaviour, each influencing the other. In this theory, these elements are conceptualised as also directly influencing our intentions, which mediates their effects on our behaviour, but perceived behavioural control is also seen as directly influencing behaviour.

The distinguishing tenet of social cognitive theory (Bandura, 1986) is that behaviour change is influenced by information received from others (e.g. observing others, messages from them) and by the results of behaviour changes (e.g. whether changes cause pleasure). Observational or vicarious learning might involve processes of imitation or modelling. The theory also suggests an interplay between the individual, their behaviour and the environment so that behaviour change influences and is influenced by the individual's thoughts, feelings, values, expectancies, etc. and context.

The information-motivation behavioural skills model (Fisher, Fisher & Harman, 2003) suggests behaviour is influenced by three constructs, these being (i) information and knowledge about the behaviour (e.g. smoking), (ii) our motivation towards that behaviour and (iii) the skills we have in performing the behaviour. The model suggests all three influence behaviour directly, and that information and motivation also have an indirect effect on behaviour that is mediated by the effect of skills.

The health belief model (Rosenstock, 1966) suggests that behaviour change decisions in relation to health are influenced by a person's beliefs and perceptions (e.g. beliefs about barriers to change, susceptibility to illness, the consequences of unwellness, etc.). It also suggests behaviour change is influenced by triggers or cues to take action (e.g. a health scare or exposure to public health campaigns) and by the person's belief in their ability to make that change.

Table 1: Relationship between key theories of behaviour change and constructs of willpower

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Health-belief model, (Rosenstock, 1966)	Model suggesting behaviour change decisions in relation to health are influenced by one's beliefs and perceptions about that behaviour, by triggers or cues to take action and by one's belief in one's ability to make that change.	No obvious relationship. Willpower as energy and/or biologically based strength/resources have no similarity to beliefs about health behaviours.	Some relationship. A person's insight into or beliefs about the level of skill/breadth of strategies they have (i.e. their willpower) to make behaviour change might influence decisions to make those changes.	Some relationship. Both models suggest behaviour change follows a decision-making process.

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Information-Motivation Behavioural Skill Model (IMBSM), (Fisher, Fisher & Harman, 2003)	Model suggesting (i) mutual influence between information and knowledge about a given behaviour and motivation towards it, (ii) that these elements influence behaviour directly, and (iii) information and motivation also have an indirect effect on behaviour mediated by skills.	No obvious relationship Willpower can be conceived of as a distinct resource to motivation (see below).	No obvious relationship. Willpower is the micro-skills that allow us to maintain the same intensity of desire to achieve a goal or standard over short and longer terms rather than the skills allowing us to perform a behaviour itself.	Some relationship. Willpower is likewise perceived as being influenced by information and knowledge about the behaviour.

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Intention, Sutton (1998)	A wish to achieve a goal or standard	<p>No obvious relationship.</p> <p>Willpower is a distinct self-regulatory strength strength/power/energy required to realign one's behaviour or thinking with a goal or standard should one deviate (Baumeister & Vohs, 2007)</p>	<p>No obvious relationship.</p> <p>Willpower is the set of skills that allow us to regulate our behaviours so as to allow us to achieve our goals or standards.</p>	<p>No obvious relationship.</p> <p>Willpower involves making decisions as to whether to prioritise a particular intention or not.</p>

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Locus of control, Rotter (1966) and Lefcourt (1976)	Cognitive, information-based representation regarding the extent to which someone thinks they have influence over outcomes in their lives versus being influenced by external factors.	No obvious relationship. Willpower is conceived of as energy and biologically based strength/resources rather than a belief about where influence and control lies.	Some relationship. Someone may have a stronger internal locus of control if they have more or better skills allowing them to initiate, maintain or stop behaviours that will in turn influence outcomes.	No obvious relationship. Willpower is a cognitive, somatic and emotional representation regarding whether one should or should not try (or continue to try) to influence a particular outcome in a particular way and not about where influence is primarily located.

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Motivation, Deci and Ryan (2012), Ryan (2012)	The intensity or strength of a wish to achieve a goal or standard.	No obvious relationship. Willpower can be conceived of as a distinct resource that helps us resist or over-ride motivations that are counter to a primary, focal motivation.	No obvious relationship. Willpower can be conceived of as the strategies that allows us to maintain the same intensity of desire to achieve a goal or standard both over the short and longer term.	No obvious relationship. Willpower can be conceived of as a decision about what to do based on the strength of a wish to achieve a goal or standard relative to that for other goals and standards.

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Self-efficacy, Bandura (1977, 1997)	One's information-based representation of their capabilities in undertaking a difficult task.	Some relationship. Past successes/failures in exercising willpower whilst engaging in relevant tasks might influence self-efficacy. If one feels tired, one might also feel less able or willing to undertake a task.	Some relationship. Past successes/failures in exercising skills/willpower whilst engaging in relevant tasks might influence self-efficacy. Without practicing the relevant skills it might be difficult to initiate, maintain or stop particular behaviours as part of a task.	No obvious relationship. Willpower is one's information, emotion, feeling, and instinct-based decision as to whether a task should be undertaken or continued with or not.

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Social cognitive theory, Bandura (1986)	Model suggesting new behaviours can result from processes of modelling and imitation.	<p>No obvious relationship.</p> <p>Willpower as strength does not feature as an explicit component of the theory.</p> <p>Rather the model holds that motivation to reproduce a given behaviour or not is fundamentally driven by social and environmental variables as behaviour is seen as being driven by its value in a given context.</p>	<p>No obvious relationship.</p> <p>Willpower is the micro-skills that allows us to initiate, maintain or stop a behaviour, or maintain the same intensity of desire to achieve a goal or standard over short and longer terms rather than the skills allowing us to perform the behaviour itself (although perhaps the micro-skills that together give the impression of willpower could be socially learned).</p>	<p>Some relationship.</p> <p>Both suggest that the reproduction (or not) of a given behaviour results from a decision based on the competing motivations and expectations of the individual.</p>

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Theory of planned behaviour (TPB), Azjen (1991)	Model suggesting behaviour is influenced by perceived behavioural control, perceived norms a person's attitude towards the behaviour, and intentions.	Some relationship. The TPB factors in perceived behavioural control which might be influenced by one's feeling of having willpower resources available.	Some relationship. The TPB includes behavioural control. Although acquired skills, are not an explicit part of the model, they probably influence perceived behavioural control.	No obvious relationship. One influence on behaviour proposed by the TPB is attitude towards the behaviour. A cost-benefit analysis of the behaviour in question may or may not inform this attitude.

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Transtheoretical model of change, Prochaska, DiClemente and Norcross, (1992) and Prochaska, Norcross and DiClemente, (2013).	Model suggesting behaviour change involves progressive stages.	Possible relationship. People are described as using higher levels of willpower during the action stage of change. What this term means is unexplained by the authors, but it could equate to strength.	Possible relationship. People are described as using higher levels of willpower during the action stage of change. What this term means is unexplained by the authors, but it could equate to use of skills.	Possible relationship. The higher levels of willpower used during the action stage of change suggested by the authors could equate to changed inputs for the decision-making process that result in changed output, i.e. someone being able and willing to initiate or difficult tasks or persist longer with them.

Construct or theory and references	Description	Relationship to willpower as a muscle	Relationship to willpower as a set of micro-skills	Relationship to willpower as decision-making
Volition, Libet (1999) and Kornhuber, Deeke, Lang, Lang and Kornhuber (1989)	A process by which one choose between courses of action, decide on one and then commit to it.	No relationship. Willpower is the energy and resources required to fuel efforts to remain on a chosen course of action if it becomes difficult or if one experiences counter or conflicting motivations.	No relationship. Willpower is the skills required to remain on a course of action if it becomes difficult or if one experiences counter or conflicting motivations.	Possible relationship. Willpower is a process by which one chooses between courses of action and decides on one moment by moment, even if it means breaking commitments to it (as in a supposed lack of willpower).

To summarise, the various ways of understanding willpower can be seen as distinct from the constructs of self-efficacy, locus of control, intention, volition and motivation, suggesting the term willpower may add something distinct in understanding behaviour change. The idea of willpower as a strength or muscle seems to have some fit only with the transtheoretical model of change and the theory of planned behaviour. The model of willpower as a set of micro-skills seems to fit somewhat with these theories but also with the health belief model. Conversely, the model of willpower as a decision-making process seems incompatible only with the theory of planned behaviour. Although all three willpower models seem compatible with the transtheoretical mode of change, this compatibility seems superficial given that it is attributable to the ambiguous use of the term willpower used by Prochaska, DiClemente and Norcross, (1992) and Prochaska, Norcross and DiClemente, (2013) and given the term tends not feature in other related articles by the same authors. The idea of willpower, however conceptualised, seemed more genuinely compatible with the theory of planned behaviour and the health belief model. Of the three different conceptualisations of willpower, that of willpower as a decision-making process seemed most compatible of all (fitting with four of the five theories), while willpower as set of micro-skills seemed to fit with three. Conceptualising willpower as a muscle seems compatible with only two of the theories. Given the term willpower has some compatibility with the tabled theories, it appears to capture some of the processes behind behaviour change.

7 Criticisms of the concept of willpower

The different models of willpower outlined in Section 5 suggest the concept lacks clarity. Furthermore, the model of willpower as a value-based choice suggests the term may unhelpfully reify a set of subtle processes (Berkman, Hutcherson, Livingston, Kahn &

Inzlicht, 2017). I believe that the model of willpower as a set of micro-skills suggests the same. In addition to the contested nature of willpower that I have described, research discussed in section 8 shows that beliefs about it significantly influence behaviour and may turn out to be as important as willpower itself.

I now in this section discuss other reasons why the concept can sometimes be unhelpful to people with difficulties attributable to 'low willpower', such as losing weight. I believe that questioning this concept will help foreground willpower as at least partly an expression of discourse and social interaction through which social processes (e.g. the need to make sense, categorise, communicate, save face and manage impressions, cooperate, be polite, etc.) become apparent rather than it simply being a characteristic or trait possessed by people. I hope to begin to make plausible the possibility that willpower might be partly socially constructed, grounded as much in communication and social interaction as in reality and therefore should be rejected as a simple and absolute expression of reality. The aim is not to suggest that concept of willpower has no validity at all, but to suggest that it can sometimes oversimplify. The idea that the concept of willpower might also be influenced by context, culture, social interaction and linguistic processes (both within and between people) and that, therefore, it is appropriate to try to understand how people understand the term follows from critiques of other psychological constructs such as intelligence, personality and attitudes. These constructs were once taken for granted but have since been problematized and questioned (e.g. Mugny & Carugati, 1986; Potter, 1996). In this section my aim is to begin to suggest that rather than just studying its psychological 'machinations' (as in much quantitative research into willpower) another appropriate way to study willpower is examining its social representations, how its attribution is influenced by collectively shared beliefs and assumptions and how willpower is constructed by people as plausible, reasonable, sensible and meaningful in specific contexts. This critique also has the purpose of

encouraging the reader to be cautious about accepting at face value the responses given by participants in this project simply as evidence of willpower as a fixed, concrete, real phenomenon. This does not mean that their responses should be disregarded or that I feel I have authority over their understandings, but rather that the reader should remain mindful of the confusion in academia as to what willpower actually is and of the other ways in which the concept might be criticised, described below.

7.1 Criticisms of the concept of willpower from a relational frame theory perspective

Relational frame theory (RFT; Hayes, Barnes-Holmes & Roche, 2001) provides a behavioural account of the human ability and aptitude to infer and derive relationships between (often abstract) stimuli without being taught such. This skill can be seen in the generativity and flexibility of human language and cognition. The term ‘relational frame’ alludes to the way in which the same stimulus can be related to and/or framed in different ways (i.e. put in varying kinds of relationships with other stimuli, such as relationships of equivalence, comparison, hierarchy, distinction, opposition, etc.), just as a portrait might be framed by a picture or window frame or television screen. The term also suggests the way in which many different stimuli can be framed in the same way (i.e. placed in the same manner of relations as each other) just as various paintings can be put in the same picture frame (e.g. as when thousands of different words are put in identical relationships of equivalence with the thousands of different objects they signify or when an object is framed comparatively with another and then put in an identical relationship of comparison with yet another).

From this perspective, when people use phrases such as “I lack willpower”, self-defeating behaviours (e.g. smoking) might be perpetuated. According to RFT this is because self-concepts can mask alternative understandings by obscuring alternative experiences or

actions. Consequently, the self is less likely to be re-examined or re-evaluated and the multi-faceted nature of the self becomes oversimplified. This may lead to a false sense of certainty about who and what one is (Torneke, 2010; Villatte, Villatte & Hayes, 2015). Furthermore, the belief that 'I lack willpower' might come to guide people's behaviour choices as they strive to maintain a coherent, consistent and stable sense of self, thus avoiding inconsistency and confusion. However, doing so narrows the responses available to them and rules out alternative responses that could enhance their wellbeing (ibid).

From this perspective, the characteristic of 'having willpower' can be seen as a way of describing behaviours that has become reified and taken as the cause of those behaviours. Attributing willpower follows circular reasoning (i.e. inaction is caused by lacking willpower and the perception that someone lacks willpower follows their inaction). Willpower is therefore taken as an inner entity separate from and capable of governing behaviour. Low willpower becomes something that needs reparation, rather than identifying more easily targeted outwardly observable behaviours (or even other psychological factors). People can be blinded to the contexts, contingencies and processes driving ineffective behaviours and instead target the self even though doing so undermines attempts to improve regulation of behaviour. Hopelessness and abandonment of future plans might follow and the potential of the individual supposedly lacking willpower is lost. Associated self-critical evaluations might also be derived by the individual (ibid).

7.2 Social materialist criticisms of willpower

Social materialist psychology is grounded in the idea that social context, material resources and opportunities shape our thoughts, feelings and behaviour. Cromby et al. (2012) state that the notion of willpower is implicit in most forms of psychotherapy in the

assumption that people can take corrective actions through acts of will. Those perceived as not taking corrective actions through acts of will might be described as uncooperative, 'resistant', 'lacking insight', 'not ready to change', etc. Although not explicitly theorized, the notion of willpower is taken for granted as an obvious, everyday human attribute that we can summon when needed (e.g. in cognitive behaviour therapy when behavioural activation or graded exposure are 'prescribed' people might feel they need willpower to begin these challenging tasks). Cromby et al. argue that 'will' and 'power' are two different capacities, with the former involving making choices and the latter involving the freedom and ability to act. Having the power to carry out our will is dependent on our accessing the requisite social, material and intellectual resources. Without such access, exercise of will becomes impossible. In other words, the qualities, skills, attributes and powers allowing action on our wills are contextual – either made possible by present circumstances (e.g. having money, social support, education, class or cultural capital and/or physical ability), or acquired through learning. For example, a person cannot do something without practicing it sufficiently for it to become an embodied skill or without acquiring the kind of experiences which engender the appropriate confidence for decisions to be made. According to Cromby et al., the idea of an immaterial force called 'willpower' which can be used when needed is therefore meaningless, and no replacement for external resources. Although it might be argued that if someone has access to social and material resources then they can have willpower, it can be countered that such a person accesses nothing more than those resources and that claiming they have 'willpower' adds little descriptive value and may be a misattribution. Cromby et al. suggest that for clinicians to assume the existence of 'willpower' and to ask people to use it may raise ethical considerations.

7.3 Discourse analytic criticisms of willpower as a concept

Discourse analysis focuses on the production and communication of meanings and how ideas are represented through language. This section uses ideas from discourse analysis to critique the concept of willpower in order to show that this may at times be problematic and to thereby build the case for undertaking this project.

From this perspective, the idea of willpower constitutes a plausible and compelling explanatory construct. As a neat and straightforward story, willpower narratives may drive out more complex but potentially more accurate stories (e.g. ‘skillpower’ is more important than willpower). As a preferred story, by virtue of its familiarity and common usage, it may drive out less preferred stories. The quality of the science is deprioritised while the quality of stories is prioritised, with the most compelling accounts becoming more highly-valued and narrative truth taking ascendancy over objective truth (Stainton-Rogers, 2006). The concept of ‘willpower’ might therefore narrow the frames of reference used for making sense of one’s thinking, decisions, behaviours and experiences (Potter & Wetherell, 1987). With ‘science’ now injecting new life and meaning into the popular narrative of willpower (e.g. Baumeister & Tierney, 2012; and McGonigal, 2011), the concept of willpower becomes positioned for potentially uncritical acceptance by the public, narrowing interpretive repertoires and blocking the possibilities offered by alternative interpretations of events. In doing so it might be conceived as producing ‘a false consciousness’ – a systematic obscuring of “the truth about health, weight and recidivism” (Heyes, 2006, p.129).

8 The effects of lay theories of willpower on people’s behaviour

There is considerable quantitative research investigating lay theories (also known as implicit theories) of willpower – people’s assumptions and beliefs about it - reviewed by Job

(2016) and Francis and Job (2018). This research is almost exclusively focused on the effects of holding limited or nonlimited theories of willpower. Those holding so-called limited theories of willpower believe it to be a limited, exhaustible resource and that effortful tasks cause psychological fatigue. Those holding unlimited theories of willpower believes it is inexhaustible and that doing tasks requiring effort is not fatiguing. The degree to which an individual holds a limited or nonlimited theory of willpower can be measured or manipulated in the laboratory (e.g. by getting people to answer shrewdly worded questionnaires that bias them towards one theory or the other).

The two reviews strongly suggest that individuals holding limited theories of willpower show lower levels of self-control after exerting self-control while, individuals holding unlimited theories of will-power do not. These results suggest the level of self-control that people show may be related to their beliefs about their willpower resources rather than to the actual depletion of willpower.

The two reviews also suggest that people holding limited theories of willpower interpret fatigue as a signal to conserve energy unlike those holding nonlimited theories. The articles also review evidence that implicit theories of willpower influence self-control performance in relation to academic performance, health and wellbeing, goal striving, and interpersonal relationships. Here the evidence suggests that individuals holding limited theories of willpower have worse outcomes than people holding unlimited theories, especially when demands on willpower are high.

Burnette, O'Boyle, Van Epps, Pollack, and Finkel (2013) published a quantitative meta-analysis on implicit theories of self-regulation. They included 85 articles and reported 273 effect sizes from 113 independent samples (N=28217, 44% female) from 10 nations. They also reviewed research from diverse achievement domains (68% academic) and populations (age range 5–42 years).

They concluded that malleable theories of self-regulation, (i.e. beliefs that self-regulation can be trained and improved rather than being fixed) are related negatively to performance goals, to helpless-oriented strategies and to negative emotions regarding one's goal-pursuit, but positively to learning goals, to mastery oriented strategies and to optimistic expectation evaluations.

Beliefs that self-regulation can be improved or developed were also associated with increased tendencies to (a) adopt mastery-oriented strategies, (b) not experience negative emotion regarding one's goal pursuit, and (c) report more positive success expectations. They were also associated with decreased tendency to adopt performance-oriented goals and increased tendency to adopt learning-oriented goals.

The effects of malleable versus non-malleable theories of self-regulation on goal setting, operating, monitoring and achievement were reported as being significant (with each effect size estimate being between 0.095 and 0.238) and with the effects of goal setting, operating and monitoring themselves having significant effects on goal achievement (that is, they mediate the effects of malleable beliefs about self-regulation and goal achievement).

Given this evidence, it seems that one's conceptualisation of willpower influences wellbeing. The apparent advantages of holding unlimited views of willpower and malleable views of self-regulation also suggests that interventions designed to promote such views could benefit people. However, there seems to be little research using qualitative approaches exploring understandings of the concept of willpower. In the following section I therefore review literature exploring this topic.

9 Systematic Literature review: How do individuals understand the concept of willpower?

This literature review aims to identify what is known about the content of people's understandings of willpower and to identify where the literature may be missing or insubstantial. A second aim is to gain information against which to compare my own findings.

A literature search for articles that might give insight into people's understandings of willpower was undertaken. The titles, abstracts and, where necessary, content of articles returned by the search engines were then screened to identify those for inclusion/exclusion in the review. All relevant articles could be accessed. The qualitative studies included were then systematically appraised using criteria published by the Critical Appraisal Skills Programme (CASP) for qualitative designs (see Appendix A for the results of this appraisal). Because there seemed to be no readily available appraisal tool for evaluating laboratory experiments or surveys, I created using ideas from Field and Hole (2002) and questions taken from Greenhalgh (2001) respectively (which were applied to May & Holton's and to Mele's articles respectively). The results of these appraisals are found in Appendices B and C respectively.

9.1 Search strategy

Following recommendations from the University of Essex librarian, all databases linked to the Scopus (including Psycinfo, PsycARTICLES, MEDLINE and CINAHL Complete) and the Web of Science core collection (including Social Sciences Citation Index, the Book Citation Index, and the Science Citation Index) websites were searched for relevant articles. Three websites for identifying 'grey literature' were also searched

(<http://search.ndltd.org/>, <https://oatd.org/> and <http://www.opengrey.eu/>). After an informal search in 2018 to develop the proposal for this thesis, a systematic search was conducted over July 2020 using the search terms below. Articles were searched regardless of their publication date. The search terms listed below were also entered into Google Scholar and the first five pages of results were checked (or fewer if there were fewer pages) for any other relevant articles.

Willpower AND qualitative

Willpower AND "implicit theories"

Willpower AND "lay theories"

"Understandings of willpower" OR "Understanding of willpower"

"Conceptualizations of willpower" OR "conceptualization of willpower" OR

"conceptualisation of willpower" OR "conceptualisations of willpower"

"Perceptions of willpower" OR "Perception of willpower"

"Beliefs about willpower" OR "Belief about willpower"

"Representation of willpower" OR "Representations of willpower" OR "Views about willpower" OR "Views of willpower" OR "Prejudices about willpower" OR "Assumptions about willpower" OR "Attitudes about willpower" OR "Attitude about willpower" OR "Attitudes toward willpower" OR "Attitudes towards willpower" OR "Ideas about willpower" OR "Idea about willpower"

Willpower AND interview*

Willpower AND (thematic OR themes)

Willpower AND "grounded theory"

Both the reference lists within included articles and articles published by authors frequently associated with research into implicit theories of willpower were searched for further potential literature, yielding three articles (Karp, 2015; May & Holton 2012: and Mele

2009). Another article (Snoek, 2017) was found through corresponding with an author of the Snoek, Levy and Kennett (2016) article. Two articles investigating people's understandings of self-control identified using an informal literature search when developing the proposal for this thesis were also included (Bergen, 2011; and Horváth, Büttner, Belei, & Adigüzel, 2015).

9.2 Inclusion/exclusion criteria

Articles were included for review if their titles and/or abstracts indicated a qualitative approach to investigation of the content of people's implicit theories of willpower or if they followed a quantitative approach but were not designed to explore the effects of people's implicit theories of willpower (e.g. fixed versus malleable or limited versus unlimited). The high volume of articles focusing on the limited versus unlimited models of willpower using quantitative approaches were excluded. Articles were also excluded if (i) the primary research topic was irrelevant to or only tenuously related to lay theories of willpower, (ii) if the topic of willpower was mentioned in the abstract merely to help account for some other phenomenon being studied (e.g. surviving cancer or giving up smoking), (iii) if lay understandings of willpower were peripheral to the content of the discussion or (iv) not written in English. For articles reporting more than one study, only the relevant aspects are described.

9.3 Search results

The searches using Scopus yielded 228 items and using Web of Science yielded 305 articles. No suitable articles for inclusion were identified using the 'grey literature' websites mentioned above. Searches using Google Scholar yielded 5 articles. Of the total 538 articles,

316 of were duplicates. After screening the titles, abstracts and article contents, 313 were excluded and 3 articles were included. As mentioned in section 9.1, another six articles not found by the search engines were included. A depiction of the selection procedure is given in Appendix D.

9.4 Literature review results

Table 2 summarises key aspects of the 9 articles that were included (i.e. the key research questions, the study design, the characteristics of the sample and the main findings). The articles are ordered alphabetically. The reader should note that two articles (Snoek (2017) and Snoek, Levy & Kennett, (2016)) follow from a single project. They report findings based on different analyses of different elements of the same dataset for different purposes, with the former describing three detailed case studies and the latter reporting on the entire sample. Together these two articles might therefore carry disproportionate weight in the discussion below (like someone in a survey completing two questionnaires instead of just one). Because the same project has yielded two articles its data and findings are overrepresented in my literature review and should therefore be seen as such.

Of the nine studies reviewed, four focused primarily on self-control using qualitative methods, three explored willpower in some way using qualitative methods, and two explored conceptualizations of weakness of will using quantitative approaches. Only two studies recruited people currently using healthcare services, while another recruited people discharged from such and another involved people who might be described as needing support in some way. Only two studies recruited students, while the remainder recruited from ‘populations of leaders’, ‘leaders in education’ and the general population. Samples came from Norway, Canada, an international symposium for leaders in education (and so

from the five continents), Austria, America and Australia. Karp (2015) did not specify from where his participants were recruited (perhaps Norway given he is based there). The qualitative articles mainly reported using in-depth interviews, while the quantitative articles used survey and experimental designs.

Snoek, et al. (2016) reported a counter-intuitive finding that contradicts the apparent consensus belief that low willpower causes unhealthy behaviour, suggesting instead that substance misusers lack the strategies to control the context driving their addiction. Likewise, Snoek et al. (2017) reported that the self-control of substance misusers is disproportionately undermined by adverse circumstances, implying willpower (arguably a distinct but related construct) may at times be inappropriately centralized as influencing healthy or unhealthy behaviour. However, neither article illuminates how participants understood willpower. It is also possible substance-users understand willpower differently others.

With regard to articles not disputing the value of willpower (but some not exactly championing it either), Alexandersen et al. (2018) reported that people discharged from medical intensive care believe willpower is promoted by believing one will recover and adopting various strategies to maintain “the spark of life” (p.3996), and that it is undermined by exhaustion, weakness, discomfort and tiring delusions. However, what precisely their participants believed willpower to be was undiscussed.

Bergen (2011) provides insight into people’s understanding of self-control. However, self-control is arguably different to willpower (as discussed in section 2) and may be understood differently. Cuschieri (2019) and Karp (2015) describe how people understand willpower. Cuschieri’s (2019) participants (educational leaders) viewed willpower as determination followed by perseverance and motivation or deciding on and then committing to a course of action. Horváth, Büttner, Belei, & Adıgüzel (2015) reported that compulsive

buyers use 'willpower-based commitments' (e.g. taking their spouse with them or avoiding use of credit-cards) to limit their spending. Karp's (2015) conclusions are undermined by the fact that he did not specify how data was analysed or provide his interview schedule. Cuschieri also barely described her method of data analysis and both authors seem to have used a circular logic to come to their conclusions so their findings must therefore be accepted cautiously. Mele (2009) and May and Holton (2012) investigated mainly students understanding of 'weakness of will' and we might cautiously transfer their results to the domain of willpower. However, the detail these two articles provide was narrowed by the constraints imposed by data collection instruments used. The table overall, then, shows that the literature reviewed provides limited detail about peoples' understandings of willpower, let alone how people struggling to lose weight (or with other difficulties) might understand it, as will be discussed further below.

Table 2: Summary of articles reviewed

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
Alexandersen et al., (2019)	What do long term intensive care patients' experience as promoting and weakening their inner strength and willpower?	Qualitative hermeneutic-phenomenological approach using in-depth interviews.	Seventeen 'survivors' (four female) of long-term intensive care in Norway.	Inner strength and willpower are promoted by "having no doubts about coming back to life, connectedness to life, feeling alive and present, meaning and purpose, and feeling valuable to somebody" (p.3996). Participants identified various practical strategies to maintain willpower. Willpower is challenged by "exhaustion, weakness and discomfort, and by tiring delusions" (p.3996).
Bergen, (2011)	To explore motivations and explanations for self-control and self-control failure	Qualitative interviews analysed using thematic analysis	17 people (10 female) from Canada with non-clinical characteristics	1. Self-control was seen by participants as involved in stopping and starting behaviours, making choices, and in guiding behaviour (e.g. moral guidelines or goals). It was seen as operating moment-to-moment, day-to-day and over longer time spans. Self-control

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
			recruited through advertisement.	<p>is often difficult but can also be easy.</p> <p>2. Loss of self-control and successful self-control can cause both positive and negative emotions and are related to taking risk, avoidance of risk and to rewards. Self-control and self-control failure are influenced by motivation or demotivation to self-control. Both can be motivated by high and low self-control.</p> <p>3. Internal attributions for self-control were: learning and experience, goals (including tactics to implement them) and guidelines, and agency and autonomy.</p> <p>Internal attributions for self-control failure were childhood experiences, lack of resources, loss of agency, disregarding goals, and depleting moods.</p>

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
				<p>4. External attributions for self-control and self-control failure were: the environment or context, external regulation, and consumerism.</p> <p>5. Self-control is influenced socially by the mechanisms of social transmission, social comparisons and social acceptance versus isolation.</p> <p>6. Participants reported recovering self-control via three main strategies: thinking and monitoring, actions that replenish self-control and psychologically avoiding the issue for a time.</p> <p>7. Personal theories of self-control provide a long-term narrative for explaining success and failures of goal-directed striving.</p>

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
Cuschieri, (2019)	Does cultural background give a different perspective to willpower amongst educational leaders?	In-depth interviews analysed using a grounded theory approach	20 participants (10 female) from 5 different continents attending an international symposium on educational leadership. Participants were "Chosen at random ... paying particular attention that the sample would be as	Willpower is seen firstly as determination, followed by perseverance and motivation. The process of willpower "is a tool by which [educational leaders] seek their inner strength, and through which they increase their motivation to succeed. Willpower is a means by which they exert a conscious effort to deconstruct issues, attributing them value, seeking a conviction and reconstructing them strategically and logically with the intent of accomplishing goals" (p.266). Willpower can adversely affect people's lives (e.g. stubbornness, over-ambition, obsessiveness).

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
			international as possible”	
Horváth, Büttner, Belei, & Adıgüzel (2015)	To ascertain the extent to which compulsive buyers have a goal to control their buying, to identify which approaches to self-control they adopt and whether these are used as much by ‘prudent’ buyers.	In-depth interviews analysed using “the constant comparative method” as described in Spiggle (1994).	17 compulsive buyers aged 23-71 (15 female) from Austria.	Compulsive buyers engage in self-control. They are aware that tiredness and their emotional state influences their self-control. They use various strategies to implement self-control.
Karp, (2015)	Not explicitly stated but seems to be: Exploring leaders’ conceptualisations of	Study 3 – In-depth interviews. No well-established approach for analysing the data was	15 participants (location not specified). “Most of these	Participants “were aware of the processual nature of willpower (need to commit, ‘cross threshold’, decide and fight negativity)” (p.27).

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
	willpower and how they think it affects their work	mentioned and little detail is given.	were with practising leaders holding top-level positions or who had accomplished great things, but ... also ... high-level consultants, as well as high achievers” (p.25).	Willpower involves committing, deciding to act, fighting, and celebrating or rewarding small successes.
May & Holton, (2012)	Not stated explicitly, but seems to be: What are lay people's concepts of weakness of will?	3 studies using between-subjects factorial designs.	Study 1 – 97 participants from ‘around the University of	Study 1 – both violations of judgement and resolution are required for weakness of will to be judged to have occurred.

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
			<p>California'.</p> <p>Study 2 – 274 undergraduate students from University of California.</p> <p>Study 3 – 117 undergraduate students University of California</p>	<p>Study 2 – weakness of will is more likely to be attributed when violation of judgement and of resolution occurs, less likely when just one of these has occurred and less likely still when neither occurs.</p> <p>Study 3 – normative or evaluative considerations (i.e. whether the action succumbed to is morally bad) influence attributions of weakness of will.</p>
Mele, (2009)	Not stated explicitly but seems to be:	Self-report questionnaire surveys using	Study 1 – 72 undergraduates	Study 1 – Approximately 15% described weakness of will as doing something one knew or believed one

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
	<p>“To clarify the nature of weakness of will” (p.2) held by ordinary people.</p>	<p>unvalidated measures.</p>	<p>Study 2 – 119 undergraduates</p> <p>Study 3 – 25 undergraduates</p>	<p>should not.</p> <p>Study 2 – 49% felt weakness of will is more accurately described as doing something you believed or knew one should not. 33% felt weakness of will is more accurately described as doing something you decided or deciding to do something you intended not to do. 18% felt the descriptions were equally accurate or inaccurate.</p> <p>Study 3 – 80% of participants concluded that a protagonist in a vignette who does not act contrary to his intention but does act against his better judgement displays weakness of will</p>

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
			<p>Study 4 – 100 undergraduates</p> <p>Location not stated but presumably Florida, USA, where the author is based.</p>	<p>Study 4 – 73% of participants drew the same conclusions as participants in Study 3</p>
Snoek (2017)	<p>To gain insight into the circumstances in which 'normative agency' (living in accordance with one's values) is impaired</p>	<p>Qualitative and longitudinal using semi-structured interviews over 3.5 years.</p> <p>Data was analysed with</p>	<p>69 opioid, alcohol and methamphetamine dependent people (approximately</p>	<p>Addiction impacts heavily on people's bodies causing some respondents to lose their energy and their trust that their bodies and would survive into the future.</p> <p>They therefore lost their self-efficacy and stopped setting goals for themselves.</p>

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
		(i) grounded theory, (ii), a narrative approach, (iii) an approach based on constant comparative analysis, and (iv) data validation interviews	30% female) from Australia. Three representative case studies were described in detail (one female).	A link between resignation and loss of self-control was identified. People struggling with substance dependency are disproportionately vulnerable to adverse circumstances which often force them to abandon plans. Regaining belief in self-efficacy is a key to recovery.
Snoek, Levy & Kennett, (2016)	Not explicitly stated, but seems to be: To ascertain whether willpower is central to recovery from addiction.	Interviews of an unspecified type, (but presumably semi-structured interviews, given the same data set as Snoek 2017 was used). Data analysed	69 opioid, alcohol and methamphetamine dependent people (approximately 30% female) from Australia	People with addiction seem not to lack willpower; rather, recovery is dependent on developing strategies to preserve willpower by controlling the environment.

Authors	Key research question	Study design	Sample characteristics	Main conclusions in relation to people's understandings of willpower
		using interpretive content analysis, thematic analysis, values-discourse analysis and qualitative comparative analysis.		

9.5 Review of quantitative articles

Mele (2009) surveyed lay theories of ‘weakness of will’ using a quantitative approach. He sought to prove or disprove certain propositions about ‘weakness of will’ to examine if it matched the notion of ‘akrasia’. Mele attributes this word to ancient Greece and says “translations include ‘incontinence’, ‘want of self-control’ and ‘weakness of will’” (p.1). He describes akrasia as acting contrary to one’s judgements of what is in one’s own best interests.

Four simple studies were described (involving 72, 119, 25 and 100 undergraduate students), each designed simply to elucidate the necessary and sufficient conditions for attributing ‘weakness of will’ to someone. The conclusions of the research are difficult to dispute, given the straightforward designs used. However, given the apparent focus on semantic precision and hence the limited responses participants were able to give, the findings were constrained by the author’s theory that weakness of will involves resolutions of one’s judgement and/or of one’s resolutions (i.e. decisions or commitments). Study 2 required participants to choose whether weakness of will is either doing something you decided or intended not to do, doing something you believed or knew you should not do or neither, while study 3 used a Likert scale (agree versus disagree) as to whether the protagonist in a single vignette showed weakness of will or not, and study 4 asked them to choose either ‘yes’ or ‘no’ as to whether the protagonist of the same vignette showed it. The article therefore offers only limited insight into lay theories of weakness of will, let alone willpower. Furthermore, the reliability and validity of the questions used to ascertain people’s views about weakness of will were not demonstrated. Nevertheless, Mele concluded that people believe that weakness of will involves either doing things that are counter to one’s judgement or to one’s resolutions.

May and Holton (2012) sought to understand lay people's understandings of 'weakness of will' using a quantitative approach. Building on the work of Mele (2009), three experimental studies with undergraduate students were undertaken (n = 97, n = 274, n = 117) but better-planned experiments were used than the seemingly impromptu survey methods used by Mele (just described), whose work they critiqued in some detail. They tested the hypothesis that attributions of weakness of will depend either on the presence of actions counter to one's judgement of what is best for oneself being chosen or of actions counter to one's resolution being chosen, versus the competing hypothesis that both such actions must be present. Study 1, involving 97 participants from the University of California and a between-subjects design, explored the effects of a person violating their judgement about what is best for oneself and/or their resolution on participants' judgements of that person showing weakness of will. There were four different vignettes involving either judgement violation, resolution violation, both or neither with one vignette allocated to each of four groups. Participants rated the extent to which they agreed that the vignette's protagonist showed weakness of will. This was most likely to be attributed when both judgement and resolution violations were present, less so when only one was present, and unlikely to be attributed in their absence. Study 2, involving 274 undergraduate students from three different universities, used an identical design, except the vignettes were more uniform in their content to allow better internal validity. The same pattern of results as in Study 1 was found. Study 3, involving 117 students from a critical thinking course at the University of California, used the same design again, but instead the moral valence of the vignette was varied. There were four different vignettes involving either immoral intentions, immoral actions, both or neither. Weakness of will was more likely to be attributed when immoral actions were present.

Overall the research designs facilitated high internal validity. The tight experimental control affords the findings some credibility and precision, but May and Holton were not detailed and only describe ‘weakness of will’ and not willpower. The involvement of mainly students limits the generalizability of the findings. The authors concluded that a simple account of weakness of will, phrased in terms of necessary and sufficient conditions, is inadequate. They believe that the concept is not best modelled by a list of properties that must be present for weakness of will to be attributed. They suggested instead that people may hold prototype or cluster concepts of ‘weakness of will’ and that without certain features, such as immorality, violation of resolutions or of judgement, people are disinclined to attribute it. Defining prototypes is difficult but they are “usually described as a kind of composite which combines, in the form of a single ‘mental blob’, the characteristics of the most typical members of the category” (Roth, 1995). The more characteristics that are present matching those in the conceptual prototype, the more likely the concept is to be applied (*ibid*). They also concluded that the patterned nature of their data suggests participants view weakness of will in patterned ways thereby indicating a real notion of it.

9.6 Review of qualitative articles

Alexandersen et al. (2018) interviewed seventeen long-term Norwegian medical intensive care unit patients (average age 55.2 years) after their discharge. The research demonstrated self-reflection and awareness of their own pre-judgements that they tried to “bridle” (p.3994). They also discussed potential ethical concerns associated with their study. All the authors reviewed all of the interviews and used hermeneutic-phenomenological approach to analyse the data. The thematic structure developed by the first author was reviewed by two others and the researchers discussed and verified that the analyses were

accurate. Additionally, the authors used a published checklist to ensure their article was methodologically strong. However, the description of their analysis still seemed brief, unclear and I feel replication would be difficult (although, this may have resulted from space constraints imposed by the publishing journal).

It may have been more helpful for the authors to carry out analysis independently to avoid group conformity. Only two interview questions were provided (i.e. with no follow up questions). Alexandersen et al. (2018) did not critically approach the concept of 'willpower' and took the concept and participants understanding of it at 'face value'. The conclusions seemed to be foregone and well beyond the data presented. For example, the authors provide quotes from participants that illustrate their belief that they would recover and go on to say that these statements signify willpower, when they might just as equally signify optimism, foresight, expectancy or being attuned to their physical state. Likewise, they claim that participants' social relationships positively influenced their willpower, when it would be equally plausible to claim that they increased their morale, arousal, or focused their attention. As a thought experiment, I tried re-reading the results but substituting the term 'chi' (roughly translated from Chinese as being 'vital energy' or 'life force') instead of 'willpower' and they remained equally plausible and coherent. As in the articles mentioned below, disconfirming evidence was not discussed. Like other authors discussed in this section, who seemed to find verifying evidence of willpower of it everywhere and were uninterested in anything else, so too Alexandersen et al. seemed to adopt 'confirmationism' (meaning researcher theories/conceptual schema were simply reinforced) and not falsificationism (meaning theories/conceptual schema were not expanded or elaborated). Nonetheless, they found participants believed willpower is promoted by not doubting that one will recover and adopting various strategies to maintain "the spark of life" (p.3996), and that it is undermined by exhaustion, weakness, discomfort and tiring delusions.

Bergen (2011) recruited seventeen participants (average age of 41.8 years) by advert from the general population of Guelph (in Canada). She “asked participants to define what self-control meant to them, to talk about a time when they had a lot of self-control, a time when they had very little ... and to discuss how they generally go about regaining self-control when it has been depleted” (p.54). Bergen described a process of data validation and verification, provided evidence for her conclusions and remained close to the data throughout. Her account was rich, coherent and integrated. By focusing on the topic of ‘self-control’, she avoided debates about the value or otherwise of the term ‘willpower’. However, in doing so she ignored a topic which is arguably vital to self-control and she did not reflect on the strengths and weaknesses of her work.

Her results (see Table 2) question the claim that self-control is simply a ‘good thing’, instead suggesting that it has costs such as emotional inhibition, missed opportunities or feeling constricted. She also suggests that the idea of self-control as a matter of individuality is misleading, and that thinking of it as being shared with others may be more helpful. Bergen seems to have accomplished her goal of achieving a general understanding of how people experience self-control and self-control failure but therefore leaves unexplored perceptions of self-control (or willpower) in clinical populations.

Cuschieri (2019) conducted semi-structured interviews with twenty educational leaders about willpower. Participants were between 30 and 64 years, came from five different continents and were attendees at an international symposium on educational leadership. The methods and results sections of this study were sparse with no description of the method or justification for the choice of grounded theory as an analytic tool. Additionally, the themes identified were not supported by data. Other concerns include a lack of reflexivity about the term ‘willpower’ or about the quality of data collected. Her work can be criticised for some of the same reasons as Alexandersen et al. (2018, discussed

above) and Karp (2015, discussed below), namely her uncritical acceptance of the term willpower in interpreting her data. Cuschieri (2019) concluded “willpower seems to be one of the most salient qualities that leaders embrace or believe that they embrace” and that “willpower is still a strong phenomenon among educational leaders” (p.273).

Horváth, Büttner, Belei, and Adıgüzel (2015) used in-depth interviews to explore the self-control mechanisms of 17 participants (average age of 37 years) from Norway. Participants were identified as being ‘compulsive buyers’ using stringent criteria. The method of data analysis used was the constant comparative method but was not clearly described and the article referenced instead (Spiggle, 1994) does not describe the method clearly either. No methods to ensure trustworthiness or credibility of findings or elements of good research practice were described. Participants recognized tiredness and their emotional state influences their self-control and used various strategies to implement self-control. As part of this, participants reported ‘willpower-based commitments’ (e.g. taking their spouse with them, or avoiding use of credit-cards) to limit their spending. However, why other strategies such as buying cheaper brands or efforts to increase financial income were not ‘willpower-based’ when some of these were arguably more so was unexplained.

This study could be criticized on the same grounds as Karp (2015, discussed below). Additionally, the phrase ‘willpower-based’ seems to be rather tenuous and descriptively vague. Even for those strategies used by compulsive buyers which could more easily be associated with using willpower (e.g. not going shopping when they felt they could be tempted), adding the phrase ‘willpower-based’ might still obfuscate the description, given the lack of clarity about what willpower is.

Karp (2015) described three separate studies related to lay understanding of the concept of ‘willpower, only one of which (study 3) met the inclusion criteria for being reviewed. This involved “semi-structured conversations” (p.25) with 15 individuals

identified as “practising leaders holding top-level positions or who had accomplished great things, but also ... high-levels consultants, as well as high achievers” (p.25). Limited information was given about the participants’ characteristics or about the interview questions and method of data analysis, data credibility, trustworthiness or quality control and little data was presented to support the findings. Karp concluded that (i) participants realised they had strong willpower early in life, (ii) that their use of willpower was clearly motivated and deliberate (iii) that they recognised that willpower involved a process, and (iv) that their development of willpower was ongoing and continual. However, there was a degree of circularity in Karp’s interpretation of these data. This could be described as follows: “How do we know willpower is important for leadership? Because leaders say so. And why are they leaders? Because they have high willpower”. The outcome implied the predicate and vice versa. The truth and existence of willpower seemed taken for granted by the researcher and the participants, rather than being genuinely explored or supported by the findings. Despite these concerns, the findings from study 3 regarding the processes involved in using willpower seem plausible and provide something of a benchmark, however flawed, against which to compare my own findings.

Snoek (2017) developed her PhD thesis from the same project and data as Snoek, Levy and Kennett (discussed below). Although 69 participants were interviewed, Snoek provided detailed case descriptions for just three of them (identified as being the most representative) - asking them what had “hampered their self-control”. I therefore include this as a separate study. The data was analysed on four levels, these being (i) grounded theory, (ii), a narrative approach, (iii) an approach based on constant comparative analysis, and (iv) data validation interviews with participants. Although the depth of this analysis is reassuring, she did not describe items (ii) and (iv) in detail and there is no discussion of data credibility

or quality control. Snoek focused on self-control and discussed willpower only briefly and the meaning or validity of the concept of willpower was not discussed.

Snoek distinguished between different kinds of self-control ((i) intentional, involving doing what one intends, (ii) instrumental, involving achieving goals and (iii) normative, involving living in accordance with one's values). She argues that a full understanding of self-control requires analysis at all three levels and that investigating capacities of self-control whilst ignoring the individual, their context and history means lapses in self-control cannot be fully understood. Her argument is that a narrow focus on self-control as the 'ability to resist temptations' misses whether a person is living in accordance with their values and ignores a broader, more complex set of issues that might undermine normative self-control. In particular, she suggested that consideration must be made of the capacity of the person's body to be a vehicle for self-control (as energy, arousal, emotions, body-image, altered appearance, confidence, health, etc. can all be influenced by addiction and other unhealthy behaviours) as loss of this capacity can be both a consequence of lost self-control and cause further loss of it. By extension, this implies willpower must be studied in ways including not just biology, development and learning history or the person's psychological state, but also situational, social, and cultural variables.

Contrasting with some of the articles already discussed, Snoek et al. (2016) described research involving sixty nine users of Australian public detoxification and opioid substitute treatment services. Participants (mostly aged 30-50 years), were asked about their goals for the next year, their plans to reach them, whether they saw themselves as strong or weak willed, and their strategies for managing substance misuse. They were interviewed three times over three years, though the style of interview was unspecified. The main strengths of this article were that, unlike others discussed, it used a clinical population and involved interviews over an extended time period. Furthermore, although only limited details were

given, the interviews seemed to have been analysed comprehensively, using “(i) interpretive content analysis, to identify typologies of ethical issues, (ii) thematic analysis ...to identify factors across different typologies, (iii) values discourse analysis, to identify ethical frameworks and thinking strategies” (p.104) and (iv) qualitative comparative analysis. Participants described themselves as being strong willed despite their addiction. Planning, foresight and strategy were found to be predictive of recovery and participants were shown to have understood the need to avoid the need to use willpower to resist temptations by controlling their environment. The authors therefore concluded that willpower is not primary in effective self-control. They also acknowledged that how respondents understand willpower was unasked but stated that they thought it “fair to assume” (p.106) that participants felt that it involved “action in accordance with one’s best judgement and perseverance whether in accordance with values or not” (p.106). Overall, this article was comparatively well-informed, clear, reflective, self-critical, and cogent though with little discussion of steps made to ensure good research practice.

9.7 Summary of literature review

Having reviewed the research literature found on lay understandings of ‘willpower’ only limited information is available on how people understand that concept. Regarding quantitative approaches, Mele (2009) concluded people believe weakness of will involves either doing things counter to one’s judgement or to one’s resolutions. May and Holton (2012) concluded that without certain features, such as immorality, violation of resolutions or of judgement, people are disinclined to attribute weakness of will. Following these two articles, people arguably see willpower as involving behaviour that matches one’s judgement, resolutions and/or moral behaviour.

Regarding qualitative approaches, Alexandersen et al. (2018) found people who had been in medical intensive care units believed willpower is promoted by believing one will recover and adopting various strategies to maintain “the spark of life” (p.3996), and that it is undermined by exhaustion, weakness, discomfort and tiring delusions. This, however, provides little insight into what their participants believed willpower to be. Bergen’s lengthy findings in relation to how people view self-control (see Table 1) might translate or transfer to their views about willpower, assuming people view the two as the same thing. Cuschieri’s (2019) participants viewed willpower as determination followed by perseverance and motivation or as deciding on and then committing to a course of action. She also concluded that the process of willpower “is a tool by which [educational leaders] seek their inner strength, and through which they increase their motivation to succeed. Willpower is a means by which they exert a conscious effort to deconstruct issues, attributing them value, seeking a conviction and reconstructing them strategically and logically with the intent of accomplishing goals” (p.266). Her participants also felt willpower can adversely effect people’s lives (e.g. obsessiveness, bossiness). Horváth et al. (2005) reported their participants used ‘willpower-based’ strategies to manage compulsive spending, but the term willpower was taken for granted without further exploration or explanation, and other strategies that might also have been categorised as such were not for unknown reasons. Among other things, Karp (2015) concluded that participants recognised willpower involves a process. He suggests willpower involves committing to a course of action, deciding to act, fighting resistance, and then celebrating or rewarding victories. However, it is unclear whether this sequence is participants’ view or his (it seems more likely to be his), given the limited methodological description Karp provided. Snoek (2017) distinguished between different kinds of self-control (intentional, instrumental, and normative). She suggested that understanding self-control requires analysis at all three levels as well as the individual, their

context and history. In particular, she suggested that consideration must be made of the capacity of the person's body to be a vehicle for self-control as that capacity both causes and is caused by lost self-control. By extension, this implies willpower should perhaps also be studied similarly. Snoek, Levy and Kennett (2016) concluded that willpower is not primary in effective self-control but did not ask participants how they understand willpower. They thought it "fair to assume" participants felt willpower involves "action in accordance with one's best judgement and perseverance whether in accordance with values or not" (p.106).

There seems to be a gap therefore in the literature, especially given the large volume of quantitative research exploring the effects of specific dimensions of people's different understandings of willpower (i.e. limited versus unlimited and malleable versus non-malleable) on their lives. Although some of the articles reviewed give hints as to how people understand willpower, much must be inferred and there is minimal detail. No qualitative research directly addressing this topic seems to have been undertaken with those having difficulty losing weight.

10 Rationale for the current study

Induction involves gaining knowledge by gathering data to establish patterns and trends to derive theories from the observations. In contrast, deduction involves gaining knowledge to see if it can be falsified. There is considerable literature exploring implicit theories of willpower using both these approaches but less taking an exploratory or explicatory approach, i.e. trying to open up rather than uncover (Lee, 2014)) This gap in the literature is puzzling given the contested nature of willpower in academia (described in section 5), the multiple meanings of the term 'willpower' (Kugelman, 2013), and given that qualitative research often precedes quantitative research, allowing for a broad understanding

of a research topic before using quantitative methods to carry out more precise and controlled studies.

Two standard critiques of positivistic research seem to apply to the quantitative investigations into lay theories of willpower discussed in section 8 (Sapsford & Dallos, 1996). Firstly, the views and experiences of those deemed to be ‘lacking willpower’ are not seen as important enough to warrant detailed exploration and have thereby been side-lined. Secondly, the reductionism inherent in positivistic research has led to narrow investigation of specific traits, meaning an absence of accounts from people given on their own terms (i.e. unconstrained by measurement tools or multiple-choice questions). This is precisely the point made by Snoek (2017) – that to understand self-control we must understand people as whole people in their social context.

Building particularly on the work by Bergen (2011) and Snoek (2017) this project aims to investigate more fully what seems to be partially explored territory, and to improve understanding of people’s implicit theories of willpower. Aiming to be respectful of participants’ complexities, the purpose is to use an abductive approach (discussed below) to go beyond the dimensions of limited versus unlimited or malleable versus non-malleable dimensions more usually investigated using a deductive quantitative approach. However, it incorporates principles from induction in that it aims use the observations to make inferences that will lead to possible generalizations (but not general laws of cause and effect).

If attributing ‘willpower’ involves social judgement or a labelling process to describe people with particular qualities and is not regarded as part of our constitutions or personalities per se it could be defined and understood differently in different contexts and between different groups. By critically analysing the concept of ‘willpower’ I have hopefully shown it is appropriate to conceptualise it as a set of ideas within a culture or society for interpreting and articulating differences in behaviour between people. From this perspective, the task is

to explore what signals are taken by people as indicating willpower, how such representations may be taken to signify a person's superiority or skill or other aspects of their mental abilities, and how together this network of symbols and meanings (i.e. social positionings and identities, understandings, evaluations and interpretations of the concept, the signs and signifiers of willpower, and the act of ascribing the label of willpower) might operate differently across different contexts to create assumptions about what is normal, reasonable, desirable, respectable, etc.

This research should therefore help identify misconceptions about willpower, particularly in relation to weight loss. This might be useful to people trying to lose weight (including those using NHS services) and other groups who might be perceived as lacking willpower (e.g. substance misusers) or those who might be seen as needing willpower in their work (e.g. teachers, nurses). The findings may also help clinicians work more effectively with challenging client groups (e.g. it might help them identify distorted, unhelpful or narrow beliefs about willpower, and/or to support clients or those in their immediate circle to think more flexibly about it).

In aiming to develop a more comprehensive description of how people understand and use the term 'willpower' this project will hopefully begin to (i) help explain why they use that term (rather than, for example, self-control, self-discipline, or effort), (ii) weaken associations between low willpower and excess weight/obesity and strengthen alternative explanations for excess weight/obesity that implicate thought processes, self-defeating behaviours, ineffective problem-solving, relationship difficulties, social inequalities etc, and (iii) help identify the subtleties, nuances and complexities of a person's presenting difficulties that may be glossed-over or oversimplified when they are attributed to low willpower. It also aims to support those attempting to lose weight to participate in discourse about willpower and to shape future research.

The specific research questions that will be addressed are:

1. What is the understanding of the term 'willpower' held by people who identify themselves as attempting to lose weight and who seek support from a weight loss support network?
2. What are their views of the relationship between willpower and their wellbeing?

CHAPTER 2: METHOD

11 Epistemology and methodology

This research adopts a critical realist epistemology. Critical realism describes “a rapprochement between what might be termed moderate social constructionism and more sophisticated versions of realism” (Robson & McCartan, 2016, p.32). It is based on an opposition to empiricist epistemology (which claims that only empirically observable phenomena can be accepted as ‘true’). While critical realism “rejects the application of positivist and empiricist assumptions (largely modelled on physics) in the social sciences, realists argue that there are alternative sources of natural science analogues for the social sciences, such as meteorology, palaeontology and seismology ... which recognise the complexity and unpredictability of their objects. ... These natural sciences accept that closure is absent and that objects exist in open systems” (Smith, 1998, p.304).

However, critical realism also simultaneously rejects the central tenet of post-structuralist epistemology that the main focus of enquiry should be language, narrative, discourses and/or texts. Simplifying somewhat, critical realism assumes that just because we can only have knowledge of the world via the workings of our sensory apparatus and minds, it does not necessarily follow that our understanding is always blurred or distorted by our biases or that the world itself is illusory or without objective qualities, attributes, mechanisms and effects. Critical realists argue that the real world and its properties, structures and mechanisms are intransitive, continuing to exist even if they are directly inaccessible and their being cannot be known or proven logically or empirically. They also argue that the phenomena that social scientists might study are not simply brought into being by the acts of ‘imagining’, naming, or describing them, but rather exist ‘objectively’ in a way that shapes

and limits what can be socially or psychologically constructed. Critical realists stress a pre-existing and independent social materiality which both influences and constrains discursive acts and practices (Redman et al., 2003).

This research does not have deductive aims (proving the consequences of and generating statements from the assumptions in a situation for which there exist a set of first principles or given premises). Instead, it adopts both abductive and inductive aims (Stainton-Rogers, 2006). From an abductive approach, it aims to generate new ideas and hypotheses with a focus on explication (i.e. unfolding) rather than explanation or verification. However, in accordance with the aims of induction, when the research was designed it was also hoped that the observations would collectively allow patterns to be identified that would in turn allow tentative but plausible and trustworthy generalizations to be made that might perhaps apply to similar client groups.

12 Design

This research used a qualitative design. Participants were interviewed using a semi-structured interview schedule. The aim was to “look across individuals in order to identify common themes [about their understandings of willpower], aiming to see which aspects are shared across participants” (Barker, Pistrang & Elliott, 2002, p.221). This approach also allowed identification of themes and qualities that might distinguish only some participants’ responses (ibid).

13 Recruitment and sampling

Slimming World (SW) is a UK-based weight loss organisation based. National Institute for Health and Care Excellence guidelines (2014) describe it as a ‘lifestyle weight management programme’ (p.66) that has shown to be effective at 12-18 months. SW works in partnership with healthcare providers (via the SW on Referral programme). Participants were recruited by contacting a representative of SW whose contact details were available on the internet. She was given details about the project and agreed to identify SW clients interested in participating. Those interested gave their contact details to the representative to share with me. I then contacted them to give a brief overview of the research, asking them to read the information sheet (Appendix E), to answer any questions they might have about it or their participation in it and to schedule one-to-one interviews.

A purposive sampling approach was therefore adopted. In other words, sampling was non-random and based on characteristics of participants and the purposes of the research. Fifteen participants were recruited, following recommendations in Braun and Clarke (2013). The SW representative sent four batches of contact details between 3rd February 2019 and 6th of January 2020 for thirty-seven potential participants (three male). I attempted to contact them all. Several could not be reached, while others no longer wanted to participate. Some became uncontactable or very difficult to contact after initial contact(s) and a mutually convenient time could not be arranged for others. In total, sixteen participants were recruited (one took part in a pilot interview). Only one participant was male. Inclusion was based on affirmative responses to the following questions:

1. Are you currently trying to lose weight or have you have tried to lose weight over the last two years?
2. Have you found losing weight difficult?
3. Would you be willing to be interviewed?

4. Is English your first language or do you consider yourself to be fluent in English?

All candidate participants were above 18 years of age and able and willing to travel to the University of Essex to participate so nobody was excluded. Nobody lacking the capacity to give informed consent to engage in the research had to be excluded.

14 Procedure

Interviews were conducted between July 2019 and April 2020. All but one were conducted at the University of Essex in the school of Health and Social Care building. The last was conducted using video-conferencing technology due to the COVID pandemic. One participant brought her young infant with her but the remainder involved just myself and the participant.

Interviews were digitally recorded. Each participant was given a pseudonym, so interview recordings transcriptions could be marked with these and therefore stored in an anonymized fashion. The document matching names with pseudonyms and the transcriptions themselves were password-protected and stored on my secure University computer drive, along with the digital recordings of the interviews themselves, again to protect anonymity.

14.1 Interview schedule development

The interview schedule was developed from scratch. Questions were designed to allow me to build trust and rapport with participants – “a key component in interactive data collection” (Braun & Clarke, 2013) so as to facilitate disclosure of potentially personal information. Following Sapsford (2007) and Braun and Clarke (2013) questions were also designed to have several characteristics, these being:

- Open-ended
- Non-leading
- Not too long
- Clear, precise, simple and unambiguous
- Tapping into only a single idea or domain at a time.
- Meaning the same thing to each participant
- Non-challenging and non-confrontational
- Non-assumptive

The draft interview schedule was reviewed by my thesis supervisors to remove ambiguities and problematic phrasings. I also sought guidance from someone working in the field of obesity (Dr Sara Appleton, clinical psychologist) to see if she could suggest aspects of the research topic which my initial set of questions had missed.

The questions were piloted with two friends and then one participant to evaluate the type and quality of information the questions elicited, to assess the overall structuring and order of the interview schedule and to gauge participants' experiences of responding to these questions. To this end, after the pilot interviews, these participants were also asked the following questions (following Sapsford, 2007):

Were there any questions you found to be difficult?

Were there any questions you thought were strange?

Were there any questions you thought were silly?

Is there anything you felt had been left out?

Is there anything you wanted to say but felt unable to say, given the interview questions?

Do you have any ideas on how my interview questions could be improved?

Their responses to these questions and to the draft interview schedule itself were used to refine the questionnaire further (Appendix F).

14.2 Rationale for using thematic analysis

The data was analysed using thematic analysis (TA), following the procedure described by Braun and Clarke (2006, 2013). Of the various analytic options available, TA was seen as the most appropriate way to analyse the interviews. A grounded theory approach was inappropriate because of its emphasis on the generation of theory (Strauss, 1987). Because, as I have argued in the previous chapter, little is currently known about people's understandings of willpower, and because of the contested nature of willpower as a meaningful construct, it seemed premature to try to develop a theory of those understandings, and more appropriate to try to explore and then describe those understandings.

Nor was the research focused on exploring the defining features of people's experience of using their willpower (which was assumed to be commonly felt as a difficult, effortful experience involving a sense of being torn between competing motivations and a sense afterwards of having used up one's mental energy) or feeling unable to do so. Phenomenological analyses were therefore similarly regarded as being unsuitable for this project. If the focus was on trying to understand or model participants' subjective experiences in relation to willpower, such an approach would have been warranted (Barker, Pistrang & Elliott, 2002; and Robson & McCartan, 2016), but not for participants' conceptual representations of willpower.

Although perhaps of some relevance, discourse analysis (DA) was also considered inappropriate for analysing this data. Wetherell, Taylor and Yates (2001a, 2001b) argue that various differing research strategies can be categorised as DA, and that these can in turn be

seen as falling into three domains of study, namely (i) social interaction, (ii) minds, selves and sense making and (iii) cultural and social relations. The aim of this research was not to focus on the first item on this list - interactions between interviewer and interviewee (speech acts, the structure and form of the conversation, etc.). Nor was it focusing on the third item - culture and social relations. The 'objects' of analysis were not 'material texts' such as television programmes, internet pages, advertisements, magazine articles and the research was not focused on "the ways in which language practices and texts form part of systems of knowledge ... [or] the ways in which ... discourses form the basis of ideological positions and are linked to, formed by and support systems of power in societies" (Yates, 2004, p. 242). However, because exploring how people understand willpower relates to item (ii) - minds, selves and sense making - ideas and principles from DA could perhaps have been relevant to the analysis for this project.

Even so, the research did not aim to explore how participants' conceptualizations of 'willpower' are constructed through day-to-day interactions with others or how people speak about willpower in particular ways so as to construct and position themselves and/or their claims in particular ways (e.g. as rational, reasonable, respectable, healthy, innocent, etc.). Nor did the research focus on how institutions, media texts and/or wider culture or the ideologies, narratives, and discourses they produce might influence participants' understandings. The research was not focused on how people's understandings of willpower might be mutually constructed through conversation during the interviews or socially constructed by collectively shared concepts, ideas, images and narratives (topics that would be more appropriate for DA (Yates, 2004)). Instead the research focused on how people's understandings of willpower are cognitively constructed by participants. The interest was in what participants' communications meant (inappropriate for DA) as opposed to what it did or

achieved (appropriate for DA). Combining DA methods with the main method of TA therefore seemed inappropriate.

Given the aims of this project, I considered TA the most appropriate way to make use of the data to construct helpful knowledge. TA “can be used as a realist method ... and as a constructionist method” (Robson & McCartan, 2016). In other words, it is applicable to different epistemological frameworks. It is compatible with abductive approaches (Rambaree, 2018; and Palsola, Renko, Kostamo, Lorencatto, & Hankonen, 2020) and inductive ones (Braun & Clarke 2006). Furthermore, TA was chosen as the primary method of analysis as it is described as being accessible to inexperienced researchers (and I consider myself as such). “For people new to qualitative research, TA provides an entry into a way of doing research that otherwise can seem vague, mystifying, conceptually challenging, and overly complex” (Braun & Clarke, 2013, p.57).

Braun, Clarke, Terry and Hayfield (2018) distinguish coding reliability TA, codebook TA and reflexive TA. They describe coding reliability TA as being only partially quantitative and using a pre-determined coding frame or codebook aimed at achieving a single ‘true’ analysis of the data that is agreed on by more than one coder. However, they also describe it as “lacking depth of engagement, open and exploratory design and analytic process and a prioritization of researcher subjectivity and reflexivity” (p.848). Codebook TA is described as using a structured coding approach, with some if not all themes determined in advance of analysis or only after data familiarization. These were therefore seen as being unsuitable for this project. Instead, reflexive TA was seen as appropriate as coding is not fixed at the start of data analysis, and it produces themes *from* analytic work. Reflexive TA is characterised as centralizing meaning, recognizing its context-dependence, emphasising the plurality of perceptions of and perspectives on reality and viewing researcher subjectivity as a

helpful and positive resource (Braun & Clark 2018). These elements fit with the aims of this research.

To find a suitable procedure to follow, Scopus was used (on the 20th of March 2020) to identify high quality general and clinical psychology sources containing articles using thematic analysis. Because Clinical Psychology Review had a Scopus 'CiteScore' of 12.12 it was identified as being a high quality source. Four other sources had higher Scopus CiteScore but yielded no articles or no appropriate articles when searched using the term 'thematic analysis'. When Clinical Psychology Review was searched for 'thematic analysis' two relevant articles were returned (Holding, Gregg & Haddock, 2016; Kantor, Knefel & Lueger-Schuster, 2017). The procedure they cited informed my thematic analysis. The four journals with the next highest Scopus CiteScores yielded no relevant articles when searched other than those appearing in Perspectives on Psychological Science, only one of which used thematic analysis (Wilson, Gosling & Graham, 2012). These three articles (identified as coming from high quality sources) cited Braun and Clarke (2006) in describing their thematic analysis methods, and I therefore do the same.

14.3 Data analysis procedure

As suggested by Braun and Clarke (2013) and by Barker, Pistrang and Elliot (2002), I initially listened to each interview recording three times before transcribing them to familiarise myself with the data, to get a better sense of the elements discussed and to consider the meanings and patterns contained within the data. This process afforded me an overall sense and appreciation of and familiarity with the whole dataset.

The interviews were then transcribed orthographically/verbatim using Express Scribe software to allow them to be slowed down and transcribed more easily and accurately (see

Appendix G for an example extract). This style of transcription was chosen instead of phonetic/paralinguistic to simplify the processing of the raw interview data and because the content of participants' responses seemed to be more informative than the way their responses were given (which provided little further information). When interviewing I was ready to note moments of incongruity between what participants said and the way they said it so that such information would be available for analysis. However, there seemed to be no moments where participants' paralinguistic behaviours altered the meaning of their responses. Throughout this process, I listed points of interest and elements I found to be recurring.

All transcripts were anonymised by changing the names of participants. No participants mentioned anyone else in their interviews that needed to be anonymized. Any information that might allow identification of participants was discussed with supervisors before inclusion in the results section of this research.

Following transcription, codes (where a code equates to a unit of meaning) were allocated to parts of the transcript. This was done in a data-driven fashion (as opposed to theory-driven) by systematically working through the body of data while searching for elements that appeared to me to be recurring patterns. The coding work was performed manually by using the commenting functions in Microsoft Word. In other words, I used that function to mark portions of data for patterns of meaning within and across the transcripts. Throughout this process, I tried to focus on the manifest meaning within the data rather than looking for latent meanings that might be perceived as being hidden 'beneath' or within the responses, though inevitably there were instances when the latter were attended to.

The codes were then used as building blocks for the construction of initial or candidate themes (where a theme can be described as a pattern of shared meaning recurring across a dataset underpinned by a central organising concept (Braun & Clarke, 2019)). This

involved organising the data into groups according to the particular code(s) that each interview segment was marked with using the 'copy' and 'paste' functions in Microsoft Word. During this process of collating codes, some parts were uncoded, recoded and/or given more than one code as appropriate so as to robustly meet the contradictions, tensions, subtleties, complexities and nuances contained within the data.

Following this process of grouping together coded data extracts into initial themes, I created an initial thematic structure. This involved visually depicting a potential thematic framework using a 'spider diagram', also known as a mind map (Buzan, 2006) to schematically depict groupings of themes (see Appendix H). I also used this process to conceptualise possible hierarchies of superordinate or over-arching themes, themes within them and possible sub-themes. Themes and sub-themes were created where the meaning contained in codes seemed to me to combine or match.

Once I had identified a tentative structure reflecting the content of the dataset, following Patton (1990), I refined it by checking (i) whether themes were clearly distinct and differentiated from one another and (ii) whether data grouped together within themes could be meaningfully related to each other in a coherent fashion. Item (i) involved ensuring an absence of relationship between themes in all their different combinations. Where relationships were found, I tried to collapse or revise those themes. Item (ii) involved revisiting the extracts associated with each and deciding whether the themes and extracts cohered into a consistent pattern or concept. In other words, I read through each set of collated codes from start to finish checking to see if any did not fit. Where extracts seemed not to fit with other extracts or the group to which they had been allocated, then I had to decide whether they had simply been incorrectly allocated to that theme or alternatively whether the theme itself needed revision. Thus, where extracts did not seem to fit together sensibly, I had to either redevelop the theme, create an entirely new theme, fit those extracts

that did not match with a more appropriate theme or jettison them from the analysis altogether (Braun & Clarke, 2006).

The process described in the preceding paragraph allowed refinement of the initial thematic structure. Subsequently, the entire dataset was re-read to “ascertain whether the [new] themes ‘work’ in relation to the dataset” (Braun & Clarke, 2006, p.91). With this re-reading, the candidate themes were now being held in mind to direct my attention towards the transcripts and their interpretation as they were read once again, so as to gauge the extent to which the themes and dataset were consistent with one another. The re-reading of the data set allowed any data that had been missed to now be coded within themes, and further uncoding, recoding and/or the allocation of additional codes. Where I found data that seemed inconsistent with the themes, the set of themes were revised and the interviews read once again.

This iterative process of (i) reading through the data set to allow coding, uncoding, and recoding to allow refinement of the thematic structure, (ii) going through the collated codes to ensure they were consistent with the newly refined thematic structure and making adjustments where necessary and (iii) then re-reading the data set to check the fit of the thematic structure to the dataset and to allow further coding was continued until refinements to the thematic map became only minor, unimportant or insubstantial. With each re-reading of the transcripts, newly added or changed codes were highlighted in a different colour to show clearly which codes had already been collated and which had not.

The collated data extracts for each theme were finally revisited to allow for integration and interpretation of the themes and their organisation into “a coherent and internally consistent account, with accompanying narrative” (Braun & Clarke, 2006, p. 92). The purpose was to identify the elements of importance in each extract and the reasons for such to facilitate a thorough, detailed analysis, specifying what was unique and specific about

each theme. This process involved reflection upon each theme, its position and relationship to other themes upon possible subordinate themes within broader themes, allowing the development of a clear, refined and succinct definition of the themes thought to describe the dataset. Overall, the whole process might be likened to creating a piece of clothing from scratch and then ‘tightening it up’ with some strategic tailoring over several phases to improve the fit.

15 Ethical considerations

Ethical approval was sought from the University of Essex Ethics Committee before starting the research (Appendix I). Written informed consent was gained from participants on the day of their interview, just prior to starting (see Appendix J for blank consent form). As mentioned, approximately two weeks prior to their participation, they were given an information sheet about the project to allow their informed decisions as to whether they wished to get involved. Details of the research were given so they could make fully informed decisions, even though this may have later influenced participants’ answers. This choice was also made because the aim was not to ‘quiz’ participants about their knowledge of willpower, but rather exploration of their understandings regardless of where these understandings came from. It was agreed with my thesis supervisors that if participants decided to research the topic before being interviewed then equally helpful discussions might follow.

15.1 Potential risks of taking part in the research

It was made clear to participants they might experience aversive feelings as a result of their participating in the research. The interview questions were not seen as being intrusive

by those I piloted the interview with. Any negative feelings evoked on the part of participants as a result of their engaging with the research was hopefully outweighed by gains from the knowledge acquired. The research provides potentially useful information to others who attribute to low willpower their difficulties in changing their health-related behaviours. Participants were advised to speak with their GPs in the first instance if they experienced persistent negative emotion following the research interviews.

Participants received a £10 Amazon gift voucher as thanks for their involvement. They were debriefed once the interviews were completed by inviting them to ask questions, and by giving participants a brief summary of the purposes of research. I also checked their wellbeing and nobody had become distressed or needed signposting to sources of support.

The interview recordings and transcripts were made available for sharing on request only with those marking/examining my doctoral thesis project. The interview recordings and transcripts will be held for approximately one more year while I pursue publication of the research. The data will be made available to the publishers/referees for that journal if required.

16 Quality control

To improve the rigor of the research, before undertaking or analysing the interviews, I undertook a 'bracketing' interview with my research supervisor where my understanding of willpower was discussed. This helped me become more conscious of any pre-conceptions, biases and assumptions regarding this topic that I might have unknowingly held, making them less likely to interfere with data gathering, analysis and deriving conclusions. Reflection on my history, values, assumptions, understandings and interests in relation to this project allowed me to be more mindful of them, to gain some distance and thereby

independence from them, thus reducing the subjectivity of my interpretation and improving the depth of my engagement with the dataset and the quality of my analyses and insight.

Prior to data gathering, for the same purposes as undertaking a bracketing interview, I also kept reflective notes. These, following Tufford and Newman (2012), explored my reasons for undertaking the research, assumptions regarding willpower and weight loss/gain, my values as a clinician and a researcher and feelings of blame towards participants that might be suggestive of presuppositions. I was thereby better able to temporarily separate myself from them and interpret the data with less bias.

Additionally, the quality of my transcribing was checked by a supervisor for a single transcript and confirmed as providing an accurate representation of the conversation. The quality of my coding was checked by comparing the codes that I had produced for three transcripts the start, middle and end of this process with codes that were produced by my thesis supervisor and then checking to see the degree to which each pair of code sets matched. The fact that there seemed to be considerable agreement in the way my supervisor and I coded these transcripts suggests that the codes were reasonable, plausible interpretations of the data. The credibility of the thematic structure was also checked with an external supervisor (Dr Sara Appleton, clinical psychologist) and three participants. Their feedback is discussed in chapter 4.

Furthermore, I tried to adhere to the 15-point criteria for good thematic analysis provided by Braun and Clarke (2006; Appendix K) throughout the project. Although this adherence and the steps described in this section do not guarantee high quality research, their description will hopefully allow better-informed evaluations of this thesis.

CHAPTER 3: RESULTS

17 Introduction to chapter

In this chapter I describe the participants recruited into this research followed by the themes and subthemes derived from their responses. After overviewing these themes, the thematic structure is described in more detail. Subthemes are matched with extracts from the interviews to illustrate my interpretations and to give the reader the opportunity to interpret for themselves. Finally, a brief narrative is provided summarising the findings and showing how they cohere together.

18 Participants

All participants were recruited through Slimming World. Some had stopped attending Slimming World by the time we met, but all identified themselves as struggling to lose weight. Table 3 shows the pseudonyms for each participant. All participants described their ethnicity as 'White British'. Their average age was 43.4 years. Unfortunately, the last 10 minutes or so of Francesca's interview was somehow lost so her responses were not fully analysed.

Table 3: Participants' pseudonyms and ages

Interview number	Pseudonym	Age
Pilot interview	Florence	24
1	Charlotte	53
2	Juliette	50
3	Bernadette	50
4	Kimberley	58
5	Francesca	20
6	Harmony	22
7	Aaron	59
8	Veronica	36
9	Angelica	44
10	Elizabeth	49
11	Roberta	34
12	Samantha	50
13	Katherine	37
14	Jennifer	59
15	Roseanne	50

19 Themes and subthemes

The main themes identified were as follows:

Theme 1: Willpower is conceptualised in different ways

Theme 2: Willpower is influenced by external factors

Theme 3: Willpower is influenced by internal factors

Theme 4: Willpower is desirable

Theme 5: People's understandings of willpower are contradictory.

These themes are listed non-hierarchically. Each is seen as being equally important and as apparent as each other in the dataset. Themes 2 and 3 seem to be related, as do themes 1 and 5, while theme 4 seems to stand alone. Table 4 lays out the different subthemes contained within them. A table showing which participants spoke to each theme, which did not, and those seeming to disagree with a given theme can be found in Appendix L.

Table 4: Overview of themes and subthemes

Theme	Subthemes
Theme 1: Willpower is conceptualised in different ways	1.1 Willpower is conceptualised as self-talk allowing one to resist temptations and to do things that are difficult but beneficial 1.2 Willpower is conceptualised as a kind of energy, impetus, drive, work ethic, tenacity or power or strength – in short, the ability to act and to sustain action 1.3 Willpower is conceptualised as a mindset or mentality 1.4 Willpower is conceptualised as a matter of habit or routine 1.5 Willpower is conceptualised as a 'want' or a matter of desire 1.6 Willpower is conceptualised as being involved in decision-making and choices

Theme	Subthemes
<p>Theme 2:</p> <p>Willpower is influenced by external factors</p>	<p>2.1 Willpower is influenced by interpersonal context</p> <p>2.2 Willpower is influenced by the environmental milieu (e.g. weather, seasons and cultural celebrations)</p> <p>2.3 Willpower is influenced by the presence or absence of external stressors</p> <p>2.4 Willpower is influenced by the presence or absence of tempting cues and triggers</p>
<p>Theme 3:</p> <p>Willpower is influenced by internal factors</p>	<p>3.1 Willpower is influenced by prioritizing its use</p> <p>3.2 Willpower can be bolstered by strategies and techniques</p> <p>3.3 Willpower is improved by having a sense of self-efficacy</p> <p>3.4 Willpower is influenced by physiological state (e.g. health, hormones, tiredness, pregnancy)</p> <p>3.5 Willpower is influenced by emotions and psychological wellbeing</p> <p>3.6 Willpower is influenced by learning and upbringing</p>
<p>Theme 4:</p> <p>Willpower is desirable</p>	<p>4.1 Willpower is adaptive and functional</p> <p>4.2 Low willpower is associated with undesirable qualities and attributes</p> <p>4.3 Willpower is desirable but has its downside</p> <p>4.4 Willpower is desirable but might be difficult to improve</p>
<p>Theme 5:</p> <p>Participants' understandings of willpower are</p>	<p>5.1 Low willpower is thought central in causing unhealthy weight gain despite the many other causal factors recognized by participants</p> <p>5.2 Participants express non-judgement towards people they perceive as lacking willpower but criticize themselves for the same</p>

Theme	Subthemes
contradictory	<p>5.3 Low willpower is centralized as playing a key role in causing unhealthy weight gain but it is not meaningfully addressed during discussions with healthcare professionals.</p> <p>5.4 People draw upon different conceptualisations of willpower when discussing it.</p>

19.1 Theme 1: Willpower is conceptualised in different ways

Participants drew upon various terms, analogies and metaphors to describe willpower both across and within interviews. Six subthemes were identified, each discussed below. These subthemes reflect participants' efforts to explain and describe what willpower actually *is* rather than the factors influencing it.

19.1.1 Subtheme 1.1: Willpower is conceptualised as self-talk allowing one to resist temptations and to do things that are difficult but beneficial

Participants described willpower as involving internal dialogue or self-talk. At times they described the mind becoming divided against itself, drawing upon the popularised image of an angel suggesting virtuous choices of action into one ear and a devil suggesting the opposite into the other. Some participants described talking back to their temptations. For example, Kimberley said

... in your mind you've got like the naughty person and you've got the good person and the naughty person is kind of like saying 'I'm going to have that cake sod it all' and then you've got the good person saying 'You don't need to have that cake you're

already fat' and stuff like that so you're kind of arguing all the time with your subconscious (lines 56-60)

Veronica likewise stated "I think it is having that conversation with yourself and if you lose that conversation that is when the willpower ebbs" (lines 372-374). Francesca also said "... to me willpower is kind of those two voices in my head and having the strength to go with the one that I know is right" (lines 218-220).

Participants also described willpower as a capacity to resist temptations. From this viewpoint, (whether or not self-talk was mentioned) willpower involves an ability to 'stick to your guns' and stay committed to a long-term goal when faced with short-term rewards that might cause you to falter. Aaron said willpower "is doing something or making your body do something that your body and your mind don't want to do" (lines 622-623). Likewise, when asked what causes people to become overweight Angelica said

Well it's lack of willpower you know. You start off thinking yeah I can do this I can do this and then ... the little gremlins in the back of your head start saying 'Oh just have one just you know that's not going to hurt' you know or sometimes you just completely lose it completely and just say 'Do you know what I can't do this just give up' (lines 602-606)

Contrastingly, Roseanne contributed

... some of the girls at work might say 'I'm on a diet' and soon as somebody comes in with something a treat they instantly have it so I guess that's low willpower if you said you didn't want it but because it's there you gonna have it (lines 620-622)

19.1.2 Subtheme 1.2: Willpower is conceptualised as a kind of energy, impetus, drive, work ethic, tenacity or power or strength – in short the ability to act and to sustain action.

Most participants contrasted willpower and motivation, where one (usually motivation) was thought of as an act of goal-setting, while willpower (usually) was conceptualised as the energy allowing people to achieve that outcome, moment by moment, particularly when things get difficult. Willpower was seen as a kind of motor that drives action, in contrast to motivation which might be likened to a compass. For example, Jennifer described willpower as something “that drives you on because if we didn’t have it at all ... We wouldn’t ever strive to do anything different we’d be just like amoebas and just sit there we wouldn’t do anything” (lines 117-123). Likewise, Juliette said

... you might have the motivation to jump up and down once but willpower might make you think ‘Actually I’m going to do that another twenty five times’ motivation might make you do it. Once you’ve done it willpower might help you carry on (lines 518-521)

At times, participants suggested that willpower is a work ethic or the ability to be tenacious or effortful but the emphasis was again on being active and expending energy. For example, Aaron said “... I think if you have too much willpower ... then that that could be an unpleasant trait because not everybody wants to work at the at the same pace or intensity erm not everybody’s capable of working at the same pace or intensity...” (lines 561-563).

Likewise, when describing her husband’s willpower Katherine said

I suppose his willpower ... inside of him making sure that he works really hard for the family you know and make sure that these have everything and I have everything we ever wanted so I suppose that’s his willpower you know that’s him deep inside to make sure he never turns out the way that his family were (lines 293-298)

Various participants equated willpower with being strong and lacking willpower with being weak. For example, willpower was described as “inner strength” (by Juliette, line 67), “your emotional and also physical strength” (by Francesca, lines 69-70) and “Being strong” (by Angelica, line 80). Conversely, when Elizabeth was asked what makes willpower worse she said “Well weakness ... that’s obvious really weakness ... makes it worse” (lines 480-481). Additionally, Roberta described lacking willpower as “a weakness and its just also a laziness” (line 328) while Samantha also spoke of laziness several times in her interview.

19.1.3 Subtheme 1.3: Willpower is conceptualized as a mindset or mentality

Participants likened willpower to a way of being or thinking, where one adopts a particular state of mind or attitude to challenges and temptations. Participants seemed to believe the mentality they adopted for themselves organized their psychologies (their attention, motivation, reasoning, emotion, etc.) and thereby influenced their willpower and their behaviour. For instance, Harmony said “... if you had parents that were quite demotivated weren’t trying to reach goals never really aspired to reach anything ... I think your willpower could come from there coz then you might have the same kind of mindset” (lines 163-166).

Likewise, Veronica said “... it’s something you work at it’s a muscle you’re exercising in order to keep ... yourself on a on a track on a mindset with a goal in mind” (lines 518-520). Angelica mirrored this by saying

Work-wise yeah absolutely ... I know in my job we have a month ends and year ends always really busy don’t really get to take breaks ... so definitely my willpower over those those times it’s just like ‘I’m hungry I need food what can I grab oh look there is a packet of biscuits’ erm and I don’t feel bad about it whereas a couple of days later when months

end is out of the way it's like 'Oh no I really mustn't do that I've got to' so yeah definitely work pressures where your mindset is that day erm you know I've got to get this work done (lines 400-406)

Similarly, when asked how poverty might influence willpower, Juliette said

Because I think if you're in that situation when you're in poverty and in that you're almost like 'Oh well there's no point anyway' so you've almost got that mindset you're almost there ((inaudible)) and when you're not you're like it's just different outlook it's different mindset (lines 145-148)

19.1.4 Subtheme 1.4: Willpower is conceptualised as a matter of habit or routine

Participants suggested that acts of willpower can create positive and negative feedback loops. They saw acts of willpower as facilitating further acts of willpower and/or lapses begetting further lapses. Willpower and lacking it were both conceptualised as being self-perpetuating or self-reinforcing.

For example, Florence said

... with losing weight, if you start putting the effort in ... if you don't see the changes you kind of lose motivation, and then willpower with that ... because you're not seeing the changes happen. But if you see the changes happen you feel better and you're motivated to do more, so the willpower is, kind of, more prominent (lines 84-88)

Roberta also said

... for me, my willpower is stronger if I've gone and done park run - I'm not going to go back home and have a takeaway, I'm going to - you know - I'm going to be very good,

and I'm going to eat healthy because I've done all that work and I'm going to not make it be for nothing (516-519)

Conversely, Juliette spoke of a downward spiral by saying "... I think if you leave things for a few days you're less inclined to feel the need to go back and do it and that particularly fits with exercise and eating" (lines 333-334). Likewise, Kimberley described a vicious circle of losing willpower leading to low self-worth leading to further loss of willpower when she said

I can have a good week like just say sticking to Slimming World plan and then I get weighed and then maybe good for another one or two days but then it just completely goes and then I'm really angry with myself because I haven't kept that up you know and the more you feel angry with yourself and feel a failure ... again makes your willpower even less (lines 375-379)

19.1.5 Subtheme 1.5: Willpower is conceptualised as a 'want' or a matter of desire

Another way willpower was described by participants was as 'want' or as a desire. When intense enough, this appetite or desire for a particular reward or outcome was seen as creating a compulsion to act (thereby perhaps creating or being conflated with the energy, drive or impetus that was also used as a way of conceptualizing willpower (subtheme 1.2)).

For example, Roseanne stated

I guess willpower yeah could go hand-in-hand with effort particularly for like a sportsman ... to be able to become the best of what they are I guess that would need willpower to want I still think it's a want ... more than anything I really do (lines 240-243)

while Katherine suggested "... someone who wants you know the good job and the the the good income and the good lifestyle they will show more willpower than someone who that

you know that doesn't really care where they end up" (lines 549-552). Likewise, Jennifer said "It's wanting something and wanting something enough to make sacrifices of other smaller more insignificant things you know for instance do I want a chocolate biscuit or do I want a weight loss on Wednesday" (lines 94-97).

19.1.6 Subtheme 1.6: Willpower is conceptualised as being involved in decision-making and choices

Participants indicated that willpower helps them make better/healthier decisions or at other times influences decision-making processes in less direct and clear ways. For example, Charlotte said

... it it prevents you from making bad decisions ... you choose you know you're, I don't know, educated to know which foods are going to help you and which foods are going to hinder you and you choose the good foods and the willpower is preventing you choosing the foods that are going to hinder you (lines 540-544)

Likewise, Francesca said

... to me motivation and willpower are making choices and kind of which choice I go with so maybe I go with a good choice or a bad choice and kind of actually the dedication to go with the good choice rather than the bad choice or go a certain way do a certain thing (lines 446-449)

Samantha also spoke to this subtheme when she described how willpower influences her purchasing decisions. She said "... I've got to have the willpower I've got to go to Tesco's or wherever and buy my stuff and not buy the bad stuff over there and so that's all willpower ..." (lines 1134-1136). Similarly, when Jennifer spoke about factors influencing willpower

she said "... if you're on a lot of medication it can have side-effects that can impact on your mood on your ability to make good decisions" (lines 500-502).

19.2 Theme 2: Willpower is influenced by external factors

Participants described various contextual elements that might influence willpower. They viewed willpower as being shaped by various factors, some of which were seen as potentially influencing willpower both positively and negatively (e.g. interpersonal context). Their understandings of willpower seemed to often involve a "when" and a "where". Four subthemes were identified, each discussed below.

19.2.1 Subtheme 2.1: Willpower is influenced by our interpersonal context

Participants viewed social support and/or stable, settled, stress-free environments as being conducive to high willpower while peer pressure and difficult relationships as undermining it. For instance, Florence said "... you can definitely pick up willpower from other people so it's definitely a trait that you can pick up from other people with their influence" (lines 127-129). When asked about ways willpower might help with weight loss, Bernadette said

Me personally I think it helps because I'm not doing it on my own so it helps because my partner is also doing it so we're eating the same sort of foods ... seeing what others can achieve I find that if someone else can do it why I can't do it (lines 616-619)

Likewise, Roseanne said that social support "Does help ... like for instance during our slimming class ... you can find towards the end of the week you're really needing a boost

you really need to speak to other people that feel the same way but that does wane again so it does help definitely” (lines 421-424).

19.2.2 Subtheme 2.2: Willpower is influenced by the environmental milieu (e.g. weather, seasons and cultural celebrations)

Participants broadly felt that a person’s sense of having willpower is context-dependent, being effected by circumstantial influences such as work patterns, poverty, the quality of one’s neighbourhood, the weather, seasons and cultural celebrations. The summer months were seen as boosting willpower and the winter months as undermining it.

Participants described becoming motivated to lose weight so as to look attractive in their swimwear while on summer holiday, being demotivated by cold, dark weather and deprioritising the use of willpower during Christmas (or other) celebrations. For example, Juliette said

I think the happier you are and the better your life is going the more likely you will be to succeed because that is the way our and that is what happens erm if you are people that are in poverty and stuff like that less likely to yeah ... Because I think if you’re in that situation when you’re in poverty and in that you’re almost like ‘Oh well there’s no point anyway’ so you’ve almost got that mindset ... and when you’re not you’re like it’s just different outlook it’s different mindset (lines 139-149)

Charlotte said

yeah bad weather I think can affect your you know a nice sunny day cheers everybody up so you probably make good decisions it’s like people tend to eat salads in the summer don’t they and you know you’re not going to have a salad Christmas day so it must effect

erm you know the weather does effect ... you're more likely to have sticky-toffee pudding and custard aren't you on a wet windy day (lines 286-295)

Likewise, Juliette said

... I think it does vary er I don't think it is the same all year round and I'll give you an example of that because if I decide I'm going to give up chocolate for Lent bear in mind that I am the world's biggest chocoholic I can give chocolate up for forty days and that's fine I've done that for the last four years and that's fine now that's willpower (lines 250-256)

19.2.3 Subtheme 2.3: Willpower is influenced by the presence or absence of external stressors

Participants suggested that the vicissitudes of everyday life influence willpower. For instance, Charlotte said her willpower improves

... if life hasn't thrown you any dramas for a while I tend to go from one calamity to another and long for a period of calm and I think that period of calm you tend to make good decisions your willpower you don't sort of dive in you think about things before you make a decision so I think your willpower is quite strong at that time (lines 303-308)

Similarly, Kimberley said

Well it's whether I'm feeling good about myself ... and there's not too much stress going around I can listen to the good voice but if there's like a lot of stress going on and and I'm in that down mode ... then I'll think I'll have that other voice saying 'Sod it eat it you deserve to have a treat' (lines 125-129)

Along the same lines, Angelica spoke about how low stress helps willpower by saying

When I when I focus on it when I haven't got anything else that is taking over my mind at that at that point and I can focus on it and I can say 'Right I'm going to go to the gym every day and I'm going to do this' erm there is nothing that's going to take my mind off it then I can do it (lines 319-322)

Conversely, Roberta said that "stresses at work" (line 122) influence willpower, while Aaron described how work-related stress had caused difficulties with willpower by saying

come sort of midday yeah I'd I'd need some willpower coz I'd be at work there'd be the coffee machine the chocolate machine erm and yeah I mean the the sort of work I was doing working the control room erm it was quite sort of fast-paced erm and the adrenalin was up and you get into the fight or flight erm and you you want sugar ... and it was hard (lines 385-392)

19.2.4 Subtheme 2.4: Willpower is influenced by the presence or absence of tempting cues and triggers

The sense that participants experience low willpower when faced with palatable foods was apparent in their responses. Roberta gave a typical remark exemplifying this subtheme, saying: "my willpower can be influenced by special offers so I might think 'Ooh that bar of chocolate's on half price I'll buy it' so really that special offer has influenced my willpower to not buy chocolate" (lines 353-356).

Likewise Francesca said:

... there's a lot of advertisements of very nice chocolates especially in the evening when you're sat down watching TV they're always advertising really nice ice creams and chocolate and even if you've just eaten dinner it makes you want to go and get a chocolate

bar from the cupboard erm so we do find that definitely reduce my willpower (lines 524-528)

Interestingly, participants believed willpower is not needed to resist potentially appetitive stimuli (e.g. alcohol, sausage rolls) if these are for personal reasons undesirable to them to begin with. If such stimuli are associated with aversive experiences, qualities or functions then they are not experienced as tempting – abstinence is easy. Metaphorically, when the right buttons are pushed then willpower becomes easier or even effortless. For instance, when asked about what might boost willpower Francesca (a student healthcare professional) said:

Erm I think it can be your experiences as well so if you've seen something negative then you're going to have more kind of willpower not to go along that route or something and also yeah things that I might have seen on placement might motivate me not to do certain things or to do certain things and things that I've seen in my family life (lines 293-297) Additionally, Harmony said "... my aunt's an alcoholic but I choose not to be an alcoholic because of her but that doesn't require willpower because I've seen the damage" (line 710-712).

19.3 Theme 3: Willpower is influenced by internal factors

Participants identified several influences within themselves that increase or decrease willpower. They saw willpower as being shaped by intra-personal forces, such as cognitive processes, emotion, knowledge and learning history. Six subthemes were identified, each discussed below. These subthemes can be contrasted with those subsumed in theme 1, in that rather than being reflections of participants' efforts to specify what willpower is or where it comes from, they instead reflect participants' views of factors influencing willpower.

19.3.1 Subtheme 3.1: Willpower is influenced by prioritizing its use

Participants felt that willpower depends on wanting to use it in the first place and prioritising its use. Some described deprioritising their long-term goals at times (e.g. when overwhelmingly stressed), meaning that their willpower was not used or required for a time, while others suggested or implied their willpower was ‘relegated’ by other priorities. Participants conveyed a sense that willpower has to be deliberately activated and held in consciousness in order for it to be useful and used and it can be deliberately deactivated or put aside. They described postponing their focus on long-term goals and instead temporarily attending to shorter term outcomes or having other matters to focus on. It seemed that the organisation and shaping of participants’ minds and behaviours depend on motivation to use willpower or not. For instance, Angelica said:

... when there’s other things going on like in my life at the moment this has taken a bit of a back burner because I’m like ‘Well hang on a minute my priorities have changed’ erm and I’m not that fussed about my willpower at the moment ... when I focus on it when I haven’t got anything else that is taking over my mind at that at that point and I can focus on it and I can say ‘Right I’m going to go to the gym every day and I’m going to do this’ erm there is nothing that’s going to take my mind off it then I can do it and I can I get a little bit obsessed with it ... when I’ve got lots of other things that are going on ... I push it back and I just think ‘You know what it’s not important’ (lines 307-324)

As part of this subtheme participants alluded to a ‘What-the-hell’ effect (Baumeister & Tierney 2012), where they would temporarily stop using their willpower and binge eat if they had a reason to do so (usually responding to a lapse in their diet regime or to overwhelming stress). For example, Aaron described such a negation of willpower by saying:

...it's when you just sort of think to yourself 'That bar of chocolate is just crying out to be eaten' so you think 'Oh you know I'll just have the one' and yeah and I think it comes down to sort of y- you then feel 'Oh I've failed, so it doesn't matter' (lines 405-407)

Echoing this, when speaking about her pregnancy Jennifer said "Well I'm going to get fat anyway aren't I so why would I worry about what I eat doesn't matter does it I'm going to get fat anyway" (lines 583-584).

19.3.2 Subtheme 3.2: Willpower can be bolstered by strategies and techniques

Some participants described using one or more 'coping strategies' or workarounds to somehow boost willpower (e.g. rewarding oneself for using willpower to achieve something, goal setting, taking small steps, planning and scheduling, focusing on long term goals when faced with temptation, seeking help, identifying and then avoiding triggers) and some expressed the view that willpower can be increased by adopting such approaches

without explicitly naming them. Speaking to this subtheme more than others, Elizabeth said

They could be taught to visualise diabetes is a really bad example I was going to say they can be taught about what having their foot cut off would be like that's a horrible example but they could be taught to visualise that what the result ... this is what I would if I was teaching someone that the pleasure of that doughnut and the hideousness of diabetes to capture that in that moment as you're staring at that doughnut or you could be taught to walk out the room you could be taught something that you'd enjoy that you could pull on for that moment ... you can be taught how you'll feel ten minutes after the thing and you can capture that feeling and call back on it when you've had that cigarette and how you'll feel after you've had that cigarette the anger the guilt the revulsion and you can be taught how to pull on that (lines 457-470)

19.3.3. Subtheme 3.3: Willpower is improve by having a sense of self-efficacy

In contrast to the behavioural elements associated with increased willpower as described in subtheme 3.2, participants said that willpower is helped by a psychological element, namely feeling capable of meeting willpower challenges to begin with. They indicated that judging themselves as being able to do what is required to meet a particular challenge in itself improves their willpower. For example, Katherine said her willpower is influenced by “the belief in yourself to be able to do what you wanna do” (lines 547) while Bernadette said

I think if you have the willpower when you can start when you've given something a go and you've took that step and then ... you know that you can do it I think your willpower becomes stronger and allows you to build up the strength i- in your head the willpower to allow you to do it so the chances of dropping back are rather less (lines 372-376)

Aaron also suggested similar when saying “... if you tried something before and succeeded then you might well say to yourself ‘Do you know what I’ve done that, I might do this’ if you’ve tried something and failed you might think to yourself ‘Do you know what? I don’t think I’ll bother coz I can’t do this and I’m a failure’” (lines 240-247).

19.3.4 Subtheme 3.4: Willpower is influenced by our physiological state (e.g. health, hormones, tiredness, pregnancy)

Participants expressed beliefs that willpower is influenced by the physical state of their bodies (e.g. hormones or ill-health). When asked about biochemical factors that might make her willpower worse, Veronica said:

I imagine if you're menopausal things like that might go I think that's something that's coming up on the horizon so for me so I'm sort of aware of erm so yeah hormonal changes er being menopausal that sort of thing (lines 189-191)

Roberta, when asked what might influence her willpower, said "Oh definitely emotions ...yeah emotion hormones ((pause)) yeah I think those would be the two main things for me its definitely if I've had a bad day I'd be like 'Oh screw it'" (lines 96-99).

It was particularly noteworthy that a number of participants reported willpower waning when they felt fatigued, suggesting there may be some truth in the conceptualisation of willpower as an energy or fuel (as expressed in subtheme 1.2). For example, Jennifer said:

... if you if you're really tired ... and you come in and you're absolutely starving and you go to the fridge and there's I don't know there's a a cheese roll there or there's the makings of a salad ... you're going to pick up the cheese roll so that that would influence you being tired hurried in a rush erm and sometimes if you feel a little bit 'Oh God I'm so tired' and you might go for a sugary drink because you think how the sugar will boost you up (lines 275-284)

Likewise, Samantha said:

For me I get up in the morning and I have all the energy in the world ... but by the end of the day I am more and more tired and then more can't be bothered ... by the time I get home at night I can't be bothered to get the bag ready to get up in the morning to go to the gym (lines 157-167)

19.3.5 Subtheme 3.5: Willpower is influenced by emotions and psychological wellbeing

Participants believed that willpower is increased by positive emotions and decreased by negative ones such as stress or depression. They often described comfort eating or using

food as a coping strategy when faced with difficult feelings. They also spoke about how painful states of mind might make it difficult to restrain their eating. For instance, when asked what causes her willpower to fluctuate, Katherine replied by saying

Erm I think emotional emotions will help either giving more willpower or not I mean I know if I've had a really bad night or a really bad day with my little girl like yesterday she was a right pain all I wanted to do as soon as she went to bed I grabbed two chocolate bars you know two not just one two (lines 506-509)

Kimberley said

... when something has happened erm for example my daughter when she's had a bad day with her personality disorder and she rings me ten fifteen times a day and I say wrong thing I will like my I'll snap but I won't snap at her I hold it all I hold all the emotions in and instead of like losing my temper which I don't want to do and I've got to stay calm with both of them I'll go to the fridge (lines 327-332)

Echoing this, Florence said

Er stress is linked with everything psychologically erm and if you're stressed then it's kind of harder to maintain your emotions or your psychological wellbeing erm and so its hard to have motivation and willpower to do the things that you need to do (lines 285-288)

Charlotte said

I think your mental state whether you're sort of depressed or you know what is going on in your sort of outside life plays a huge part in how you are ... I do tend to find also if I'm bored my willpower changes (lines 266-275)

19.3.6 Subtheme 3.6: Willpower is influenced by learning and upbringing

Participants felt that willpower in adulthood is influenced by past experiences and the things learned when younger, and particularly by the style of upbringing. As well as suggesting that past episodes and events influence willpower in the present, they communicated a sense that people somehow learn willpower from their parents. For instance, Katherine said

I think not ((pause)) I think not having what you wanted when you was younger makes you have willpower because you want to do better you want more for yourself and your family and everything else erm and I suppose if you if you have a good upbringing you still want what you've got so I suppose the ((pause)) yeah I mean ((pause)) yeah I mean the past could determine how much willpower you've got it could influence it (lines 376-381)

Likewise, Jennifer said "I think that the way you're brought up you know is more influential than your actual biological chemistry" (lines 265-266), while Samantha said

It's that little voice in the back of your head that your mother's installed in you the same one that says you've got to do that and ((inaudible)) and your mum's going be watching you if you don't do it I think I think it's installed in you over for years something forces you so I think definitely how you're brought up" (lines 148-151)

Some went further to suggest that children might rebel or resist their parents and thereby the quality of their willpower will be determined independently of their parents somehow.

19.4 Theme 4: Willpower is desirable

Participants viewed willpower as being a positive, attractive quality. The overall sense was that (whatever else willpower may be) participants understood it as being helpful, valuable and key to success. Some participants seemed to view willpower as being vital to living a ‘normal’ life let alone success. Four subthemes were identified, each discussed below.

19.4.1 Subtheme 4.1: Willpower is functional and adaptive

As well as being central to weight loss (see subtheme 5.1) participants also suggested that willpower facilitates various everyday tasks such as going to work or being assertive. For instance, Harmony suggested

Yeah its important in everything really because its it’s kind of like your natural drive one part of it is your natural drive and then the willpower side of it is the continuing to do it through challenges erm and I think actually having willpower makes you a much stronger person if you can say back ‘Well I had the willpower to do that’ or ‘I had the willpower to do this’ like whether job career erm yeah like dieting going to the gym (line 115-120).

Likewise, Florence identified willpower as being important for going to work (“I don’t enjoy work at the Copacabana bar ... and so the motivation that I need the money gives me the willpower to like sort my life out and have a schedule” (lines 476-479) and Francesca for study

In my life its helpful coz it enables me to study like today I’ve come in a couple of hours early to sit and do some studying so its given me having the willpower to actually come in and do that when I don’t really need to over the summer ... (lines 377-380)

Bernadette described how she saw willpower as important for success and achievement when she said

... it may take me a day or two erm to give myself a kick erm to then trigger my brain and the willpower to then achieve and then keep along those I do struggle I would say as a daily type thing it takes me a little while to use my judgement erm recognition I'm not very good as myself at recognising my abilities and the willpower to go forward and do different things erm like the current role I'm doing I'm doing supervising and I've only done it for a couple of years now erm ages ago people would say 'Well why don't you go for the supervisor's role' and things like that 'No I can't do that' erm now I'm doing it erm I suppose it is the willpower and the pressure of polite pressure of others to say 'Give it a go you can do it you're doing it on a daily basis' and sometimes you you've got to think 'Well yes I do go for it' and if you don't achieve in like an interview or something you learn by it so it gives you the ability to go for it again and be that stronger person (lines 340-352)

Likewise, Elizabeth said

I think people who've been successful in life might have been lucky but I do think they've people who have got firsts they've had willpower to make themselves work I think people who've done well moved up the work ladder have had willpower to do that I think Olympic athletes have had willpower I think doctors brain surgeons have had willpower at some stage in their life to keep their head down working and working long hours when they could have given up (lines 359-365)

Participants also identified willpower as organising and regulating our behaviours, allowing healthy or difficult courses of action to be chosen in the short-term (subtheme 1.6 regarding decision-making) and patterns of (healthy or difficult) action to be repeated in the longer-term, (subtheme 1.4 regarding habit or routine). Overall, participants seemed to feel

behaviour change can begin if willpower can be found and, if sustained, so too can changed behaviour be sustained. Participants indicated that when willpower is absent, then unhealthy choices are made and/or patterns are broken (e.g. a diet is forgotten or postponed). For instance, Roberta said “I think willpower is the ability to say I’m either going to stop or start or change something and committing to it and sticking to it” (lines 36-37). Elizabeth said “it stops you doing things that aren’t good for your life” (lines 499-500) and that “I think ... it’s willpower that keeps you going but I guess that’s motivation as well” (lines 582-583).

Elements described as helping with behaviour change by participants at the start of each interview were generally very similar to the elements they associated with willpower, suggesting behaviour change and willpower may be incorporated or represented in the same conceptual networks by participants. When asked directly about achieving behaviour change, some explicitly said that willpower is important, while others spoke of the same factors that were identified as influencing or being willpower, namely the importance of interpersonal context, mindset, avoiding tempting triggers and cues, using strategies (small steps and planning), and developing new habits in order to change behaviour. For example, when asked how people go about changing their behaviour Juliette said “Willpower, strength, determination, will to succeed I guess ... set a goal and aim for it ... focus prioritise differently” (lines 18-31). Similarly, Jennifer said

Usually through willpower ... being decisive and clear thinking and having a set goal, not one that is not necessarily an immovable goal ... but something that is, you know, within within a bit of a reach you know without being too far and ... you can take baby steps to obtain those ... little goals each one is a a milestone and you just go past it ... the most thing is the desire to change ... Think it through and plan it so that you’ve got the tools to make it happen erm in the right kind of way (lines 32-65)

19.4.2 Subtheme 4.2: Low willpower is associated with undesirable qualities and attributes

Apart from weakness, participants equated low willpower with other characteristics that can reasonably be described as being unhealthy, unlikeable and/or unattractive within British culture. For example, Juliette described people lacking willpower as “Probably ... sitting in front of the TV on the sofa and doing not a lot, not moving very much not aspiring to do anything, just sitting there waiting for the next day to run around” (lines 383-385). Kimberley also painted an unflattering picture of such people as being “thirty odd stone laying on the bed and asking whoever they live with to go and buy them ten burgers” and as “self-loathing themselves, hating themselves ... feeling out of control of themselves” (lines 476-477). Harmony added to this picture by saying those lacking willpower are

like a slob ... Someone that doesn't have a job. I can imagine them being like quite unclean, just can't really be bothered thinking that obviously people need the- like people need er benefits and stuff like just willingly living off benefits as use of the system rather than thinking 'No I need this to like survive' (lines 658-663)

Matching their views of willpower as functional and adaptive and low willpower as undesirable, participants associated low willpower with self-criticism and/or feelings of low self-worth. Participants described a level of dissatisfaction with themselves after episodes where they had perceived themselves as lacking willpower. For example, Harmony explained how she called herself “an idiot” and asked herself, after lapses of willpower, questions such as “Why are you here?”, “What is the point in you even being here if you're not gonna have a purpose and do stuff” and “What is the point in you living” (lines 997-1021). Roberta also said that her mental wellbeing

definitely will drops yeah I feel annoyed with myself that I've lost that willpower and I've allowed myself to deviate off the plan erm and its its not just annoyed its kind of just my

whole feelings drop and I'm miserable and I'm probably not a particularly nice person ((laughing)) ... to be around and I just get very low and that yeah that definitely affects me ... I think I used to be quite horrible to myself (lines 550-557)

She also described saying to herself “‘You’re fat and you’re disgusting’ ... ‘Look at yourself’” and that such episodes were “‘definitely a failure’” (lines 574-578). Mirroring this, when she has felt low in willpower, Roberta said that “‘I will probably say ‘I’m so weak’ yeah probably call myself ‘weak’ yeah’” (line 903).

19.4.3 Subtheme 4.3: Willpower is desirable but has its downsides.

Although willpower was overwhelmingly described in positive terms, when asked if there might be any drawbacks to willpower, participants unanimously agreed willpower can ‘backfire’ in some way. It was as if they viewed willpower as being on a continuum from weak to strong with non-existent versus inflexibility at the two extremes. The implication was of an ‘inverted U-pattern’ i.e. too much and too little willpower are ‘bad’ and in the middle is optimal. For example, Charlotte said:

Mmm probably it can make you quite boring. maybe I suppose, you know, if you’re that strict you never let yourself sort of relax and have fun so you could be deemed quite a boring person if you never ever break the rules a little you know, you never have a glass of wine, you never eat that, and everyone around you is, you know, would you want to be that person’s friend because you’d be thinking ‘You’re quite dull’ (lines 444-449)

Likewise, Veronica said:

if you are using your willpower to with your anorexia or if you are using it your willpower almost against yourself I think then I think it can be a problem but I think that’s more of a is somebody I’m thinking I’m thinking of my mother here who is who will argue the sky is

green if she feels like it erm so she has got willpower she just hasn't got doesn't use it in the right way perhaps (lines 452-457)

19.4.4 Subtheme 4.4: Willpower is desirable but might be difficult to improve

When asked directly, most participants had difficulties suggesting ways healthcare and/or weight loss professionals might help people increase willpower. Although a few suggested psychological or behavioural strategies would help them, most could not articulate much beyond support groups and encouragement. It was also noteworthy that nobody suggested psychoeducation on what willpower is, how it operates and how it might be used more efficiently or effectively despite many articulating specific techniques that might improve willpower elsewhere in their interviews, or the more general belief that learning coping strategies improves willpower. For example, without wishing to disparage her contribution to the research in any way at all, Samantha could only suggest

... everyone has to go for a health check, everyone need to stand on the scales at the doctors and they be told you're underweight or overweight this is what you should do but then should you be told you're overweight if you're only a couple of stone overweight really does it matter life's too short ... if say there were offers at the gym you know look free training sessions and you belong to this and you can special offers and stuff things getting you through the door getting you motivated if you've got a nice trainer and you like the gym teacher and stuff like that it's surely things like that would help if you know if there were better food options at Tesco's rather than you know if a bag of Buttons was six pounds but a really nice looking pineapple salad or something was a pound you'd go for that but the fact that the fruit is two pounds for a two bits of pineapple and a pound for a bag of Buttons you're going to go for the Buttons all day long (lines 1730-1755)

Similarly, with greatest respect to Katherine, she could only suggest

Being there being having someone to talk to I think would help ... Showing that you care as well I think a lot of people probably needs that you know that I think there's a quote somewhere or something that says you know 'Love doesn't bring you food doesn't bring you love or happiness but friendship does' I think I've seen that somewhere maybe its in the ((inaudible)) or in a Weight Watchers meal or something but you know I think you know some people might eat for that comfort thing but having someone to talk to would help ... I suppose you know if you had that somebody that took the time to speak to you and to care about you then it would spur you on to want to do better (lines 854-873)

19.5 Theme 5: Participants' understandings of willpower are contradictory

Participants constructed willpower in different ways at different times. However, the overall sense was that they found it difficult to say what willpower is and where it comes from. Additionally, there were other inconsistencies within the data they provided. Four subthemes were identified, each discussed below.

19.5.1 Subtheme 5.1: Low willpower is thought central in causing unhealthy weight despite the many other causal factors recognized by participants

Although participants recognised the complex and multifactorial nature of weight gain and acknowledged various other contributory factors (e.g. poverty, sedentary lifestyles), they simultaneously held a contrasting and simplified view attributing to willpower a primary determining cause – one having a crucial effect on the system. In the following examples, each person had previously acknowledged other factors contributing to weight gain.

Roseanne said willpower is “probably the top really because all those things could ... be there but if you’ve got the willpower you can fight against them all” (lines 847-848).

Likewise Roberta said “I think it plays a big role if it didn’t there are so many people who are sitting in front of a computer all day not doing a thing if willpower wasn’t - we- then everyone would be obese” (lines 522-544) and Angelica said “The willpower is the overwhelming you

know you you must have willpower to be able to overcome those issues and to lose weight you won’t do it without any willpower” (lines 683-685). Elizabeth said it is

very important ... I think you still need the willpower over the other stuff so you can get the education and the lack of poverty once you’ve ruled all those out you still need the willpower and I do believe observing society it is willpower for a lot of people (lines 735-748)

She also said “for the bulk of society ... it is down to willpower greed” (lines 727-728).

Likewise, Angelica said “I think the willpower is the overwhelming you know. You must have willpower to be able to overcome those issues and to lose weight you won’t do it without any willpower” (lines 683-685).

19.5.2 Subtheme 5.2: Participants express non-judgement towards people they perceive as lacking willpower but criticize themselves for the same

Participants perceived people lacking willpower as having various potentially problematic characteristics (see above), but they still expressed somewhat compassionate views towards such individuals. Conversely, many participants described self-critical thoughts and feelings (see above) for regarding their own perceived lack of willpower. In section 19.4.2 participants have been quoted above as having self-critical or painful thoughts and feelings following episodes of being unable to find willpower. Here, we can see how the

same people communicated acceptance and non-judgement toward those who might be perceived as lacking willpower. Kimberley said that “I feel that they’re in the same boat as me and I feel sorry for them ... I mean it is a mental problem as far as I’m concerned” (lines 785-791). Roseanne too, when asked whether she felt people lacking willpower are bad in any way, said “No no I don’t think they are erm I think it’s just the hand you’re dealt” (line 652). Likewise, Harmony stated

... because if you can be like mentally unwell then that’s gonna have a massive impact on your willpower. Y- you might not even have the capacity to have willpower ... so I wouldn’t necessarily feel like I wouldn’t feel untowards towards them (lines 671-675)

19.5.3 Subtheme 5.3: Low willpower was seen as playing a key role in causing unhealthy weight but it is often not meaningfully addressed during discussions with healthcare professionals (HCPs)

Few participants had considered discussing low willpower with their GP even though they felt that willpower plays a pivotal role in determining their weight (as described in subtheme 5.1). Some seemed to feel this topic was not appropriate to discuss with a GP. For example, Florence said “I’ve never really thought that it would be something that I could speak to someone about erm yeah” (lines 614-615) while Juliette said “if I went to the doctor and said I haven’t got the willpower to lose weight I’ve just got this feeling that they’d say ‘What do you want me to do about it’” (lines 753-755). Those who had discussed it with their GP felt the advice they received was unhelpful (e.g., Angelica and Jennifer both said their GPs had essentially told them to simply eat less and exercise more). While some felt the support offered by Slimming World in relation to willpower was helpful, others felt it was not. For example, Kimberley said “when I’m talking in the group Slimming World erm but

to be honest the lecturer will say ‘It’s not about willpower it’s about its about you know just doing it basically’ but it is willpower I don’t care what she says” (lines 867-870).

19.5.4 Subtheme 5.4: Participants draw upon different conceptualisations of willpower when discussing it

Although some inconsistency and incoherence might be expected in any interview, it was noteworthy that participants used different vocabularies to describe willpower at different times. Perhaps participants could have accounted for some of the discrepancies if questioned further, but other contradictions seemed more irreconcilable. For example, Jennifer very quickly likened willpower to a drive, a decision-making process and to self-talk when she said

The willpower is the is the ticking over of the engine as it were and if that’s not ticking over then nothing is going to happen you’re not going anywhere but then if you’re thinking of it as an engine, once you touch the accelerator a bit and you start to rev it up a bit it’s a case how are you going to be reaching for a bar of chocolate or are you going to think ‘Actually no I don’t actually, I’m going to go for an apple’ erm and it’s making a decision and making a choice. I’m not feeling ‘I can’t have the chocolate. I choose not to have the chocolate at the moment’ you’re not saying never but i- i- that’s willpower to be able to say ‘No I don’t want that at the moment. I’m not saying I could never have it but I can leave it away at the moment. I’ll have that instead which is a better choice’ (lines 989-999)

Equally, at different stages Angelica suggested that willpower is a strength (line 80), a personality trait (line 126), a matter of prioritisation (lines 279 and 309) and of strategy and technique (line 412-441). Echoing this, Aaron framed willpower as being an ability (lines

67-70), an emotion and personality trait (lines 180-181), a product of feeling in control (lines 340-343 and 417-429), a product of personal characteristics, genetics and “what’s inside” (lines 280-281) and finally something that is produced by psychological meanings (lines 292-300).

20 Summary

In concluding this chapter, the themes and subthemes described could be described as being analagous to a gem cut into multiple distinct facets. Looking into any one facet one might see reflections of the others. I have tried to carve out the themes along lines of obvious difference, but inevitably some level of similarity may remain between some subthemes. The decisions about how to structure the themes were inevitably influenced to a greater or lesser extent by, for example, my understanding of theories in relation to willpower, my purposes (e.g. to tell a plausible and convincing story in this thesis), and should be taken as being operational or pragmatic rather than absolute and definitive. However, the themes were also constrained and shaped by the raw ‘uncut’ data.

Overall, participants viewed willpower as being a complex phenomenon that is variously determined. They spoke of environmental, biological, familial, and psychological factors influencing willpower (theme 2, subtheme 3.4, subtheme 3.6 and theme 3 respectively). Given this complexity, it was perhaps inevitable their understandings of willpower were at times contradictory (theme 5) and that they found it hard to articulate meaningful ways it might be targeted by HCPs (subtheme 4.4). Simplifying somewhat, the overall sense was that participants viewed willpower as something that is organised by and organises our thinking (i.e. our decision making, our self-talk and our mentality, (as suggested in subthemes 1.6, 1.1 and 1.3 respectively)) and our behaviour (subtheme 1.4) so

that they become adaptive and functional (subtheme 4.1). Given that willpower was seen this way, it is unsurprising that it was also seen as being crucial in maintaining healthy weight (subtheme 5.1) and that low willpower was associated with undesirable qualities, traits and attributes (subtheme 4.2). If willpower is conceptualized as some kind of special energy, drive, impetus and/or work ethic (subtheme 1.2) then its association with success and achievement makes good sense. This conceptualization might also have some truth given that participants reported that willpower becomes harder to find later on in the day and during the winter months when people have difficulties with lowered mood and motivation (as part of subtheme 3.4). The participants' view that willpower is influenced by emotions and psychological wellbeing (subtheme 3.5) is also consistent with their feeling that it is lower during the winter months (as might be attested by those who identify with the diagnosis of seasonal affective disorder).

If we are not feeling 'up to it', if it is the wrong time of day or year, or if we have other reasons for doing so, long-term goals and the willpower required to attain them might be deprioritised (subtheme 3.1), suggesting that willpower is fragile. But participants also conveyed a sense that willpower begets further willpower (subtheme 1.4). Although good habits can be easily broken if we are stressed (subtheme 2.3) or if tempting cues are present (subtheme 2.4), participants felt that certain factors can increase willpower. These include adopting the right mindset (subtheme 1.3), support from others (subtheme 2.1), building up a 'run' or 'string' of successful efforts to use willpower (subtheme 1.4), employing strategies or skills (subtheme 3.2) or believing that one will be able to summon willpower (subtheme 3.3). Because willpower is, according to participants, influenced by mental wellbeing, this suggests the importance of responding to our own lapses and/or feelings of lacking willpower with the acceptance and non-judgement we show others we perceive as lacking willpower (subtheme 5.2) rather than self-criticism (as is our tendency, reflected by subtheme 4.2).

CHAPTER 4: DISCUSSION

21 Review of key findings

This project provides new insights into how people having difficulty with weight loss understand willpower - a domain not previously investigated. Specifically, the findings suggest there is no single way participants understood willpower, that they see willpower as a desirable quality (although it may have downsides and it is difficult knowing how to develop it) and low willpower as undesirable. They also suggest participants understand willpower to be influenced by environmental forces (i.e. one's social and interpersonal context, the weather and seasons, the presence or absence of stressors or of tempting triggers) and internal factors (by prioritizing its use, using strategies and techniques, having a sense of self-efficacy, and by one's physiological state, emotions, psychological wellbeing, and one's learning history). Finally, they indicate participants understandings of willpower are contradictory or inconsistent (in that (i) low willpower is centralized as playing a key role in causing unhealthy weight even though many other causal factors are also recognized and it is not addressed in meaningful ways during discussions with HCPs, (ii) participants express non-judgement towards people lacking willpower but criticize themselves for the same, and (iii) participants draw upon different conceptualisations of willpower when talking about it or apply the same conceptualisations inconsistently).

22 Methodological critique

A methodological critique describing the strengths and limitations of the research will now be given. This will then be followed by a discussion of the implications of the research for theory, research and clinical practice.

22.1 Methodological limitations

The literature search strategy described is clear and reproducible. However, there is no consensus on how effectiveness of search strategies should be evaluated (Cooper et al. 2020). The search yielded way more excludable than includable articles, suggesting low precision. The extensive search terms used may have caused this. Of four of the articles identified informally, none had keywords seeming like they should have been included as search terms and their abstracts suggested no overlooked search terms either. The remaining two informally identified articles were unpublished and so had no keywords, but again their abstracts suggested no overlooked search terms. I do not believe that any of the articles that were excluded because their titles, abstract or content indicated they were irrelevant to this project would have been included if I were to repeat the screening process again. One can only conclude that the formal literature search identified few relevant articles because there is scant literature on this topic.

Recruiting NHS weight management service-users so the findings would be more relevant to them would have been preferable. They may understand willpower differently to those participating. However, the findings may have greater transferability to other groups given participants were from a non-clinical population.

Participants' views about willpower may differ to those putting their names forward for participation but then not participating, and to those not putting their names forward.

Non-participants may face tougher situations requiring higher levels of self-control (and therefore may have different beliefs). The almost exclusively female and exclusively White-British sample reflected the demographic make-up of the Slimming World group from which participants were recruited according to the group consultant. Responses given by the male participant were similar to those from females.

In hindsight, some of my questions were not well designed. Firstly, I asked participants about behaviour change in general, but these questions added little to the findings. Asking participants whether they understood willpower to be the same or different to the concepts of discipline and motivation now feels like an incomplete question. Asking about other qualities such as self-control, skill, effort, determination, focus and energy might have produced more useful data. Asking participants to suggest what support might help boost people's willpower in hindsight seems an inadequate exercise in service-user consultation which revealed little. Better would have been exploring in greater depth why they did not ask for such support and inquiring specifically and separately about seeking support from GPs, psychologists, dietitians and Slimming World staff.

I may at times have led participants with my questions. My assumption was that participants would be able to disagree with any leads accidentally embedded in my questions but this may have been wrong. My aim was to get participants to talk about willpower as freely as possible, and for them to enjoy the interview process so they would feel relaxed, comfortable and able to speak honestly, although this may have meant prompting them with ideas too quickly. My conceptualization of myself as a mere *trainee* clinical psychologist caused me some insensitivity to this issue, to perceive myself as being less authoritative than perhaps participants might and my questioning as less influential than perhaps it was.

Although I spent time breaking the ice with participants by asking them 'warm up' questions so as to present myself as humane, likeable, reasonable, trustworthy and someone they could

freely disagree with, this may have been insufficient. While some may have felt able to be forthright and contradictory, others may have felt unable to disagree with me and been acquiescent. That said, the emphatic manner, tone and content of some responses suggests participants were not always led when this might be the accusation. At times answers came with a force and conviction that suggested participants' views were very much their own.

Because questions were not always asked in the same way they may have meant different things to different people (although questions were therefore asked in a natural and authentic way). I had some training in conducting interviews but did not find it particularly helpful. That said, I feel overall I found a good balance between having reasonably informal conversations, creating a relaxed atmosphere conducive to their discussing potentially sensitive material and avoiding making participants feel interrogated versus attaining some level of standardized presentation.

Less time could have been spent asking about factors apart from willpower that influence weight gain as these were peripheral to the research topic and allocated instead to asking other questions. Additionally, because interviews often took place after work I was less attentive. Some follow-up questions were therefore perhaps not asked, some areas left unexplored, and I failed to spot that questions were sometimes not answered clearly. Because some participants had also just finished work when they arrived the quality of their responses may have been undermined but this was unavoidable.

Because an interviewer's appearance can influence the responses given on sensitive issues (Henry, 1998), my somewhat slender physique may have positioned me as an 'outsider' and influenced participants' responses. They may also have been more willing to disclose to another group member, or if we had been able to meet beforehand but these were impractical. My inexperience with weight difficulties may also have limited my empathy

during data analysis. Providing participants with a coded transcript of their interview so they could verify interpretive accuracy would therefore have been desirable.

The image of willpower as being like an angel whispering into one ear and a devil whispering into the other was a recurring theme. However, this image may be unique to this particular Slimming World group so this finding should be taken cautiously. Although a common metaphor, this and other ideas about willpower may have been disseminated within the group by a charismatic member or by the group leader and may be unique to it. Checking this with participants would have been helpful.

By necessity, the different stages of the research were undertaken in more of a linear-sequential fashion than ideal. The interview schedule was not refined over the course of the project to get better quality data as it would have had interviewing and coding been done in an iterative and reticulating way.

The project assumed that people have meaningful understandings of willpower, and that these would pattern what they said about it. A flaw in the rationale of the interview method is the assumed stability of people's views. Although coherent patterns within the dataset have been identified, there was certainly some inconsistency in people's views. Beliefs about willpower might vary, for example, a week before/after New Year's Eve, before/after giving up smoking or with age. Furthermore, at least some responses may have been rationalizations of unconscious processes which cannot be accessed by the conscious mind.

Finally straying away somewhat from methodological critique and focusing on limitations in my technical expertise, had I known of its availability, I would have completed a social identity map (Jacobson & Mustafa, 2019). This allows qualitative researchers to formulate and be reflexive about their various social identities, how they intersect and how they are influenced by social positioning. Using this tool may have afforded me a greater

degree of insight into the power relations texturing our conversations and thereby greater ability to respond to them in a sensitive and respectful way.

22.2 Methodological strengths

Rather than creating an artificial closed-system to allow experimental control the project used an open-system approach based on participants' articulations regarding willpower. Instead of attempting to isolate and manipulate variables to identify relationships between them, this project acknowledged the uncertainty and complexity inherent in social and psychological processes and constructed knowledge about willpower in a different way. Instead of breaking down people's understandings of willpower into component parts and taking a unidimensional approach (e.g. only looking at the influence of limited versus non-limited theories of willpower) this project sought to understand their implicit theories in a richer and more holistic way and as directly and authentically communicated (thus allowing a potential dialogue with more positivistic ways of researching the topic). Rather than collecting and explaining evidence about willpower or testing hypotheses, it focused on how willpower is fundamentally identified and constructed. The project sought not to improve or reproduce scientific knowledge about willpower, but to expand and elaborate the knowledge systems in which research programmes into willpower and lay understandings of it are embedded.

The reasons for using a reflexive thematic analysis were stated in the methods section and the rationale for using it to meet the aims of the research was described. The conceptual underpinnings of the research and the methods of data collection matched this approach well. Apart from the limitations described above, the method described by Braun and Clarke (2006) was adhered to closely throughout the project and no supplementary

procedures or methods were used, thus preserving epistemological and ontological coherence. The procedure was, I hope, described with transparency, clarity and detail, rather than generically describing thematic analysis.

Feedback on the thematic structure from the three participants can be found in Appendix M. Veronica only disagreed that willpower can have drawbacks. Harmony said that “From my distant memory, I believe you have perfectly captured my thoughts and feelings within your thematic structure” but also that Slimming World customers might have different opinions about willpower. Roberta seemed to identify with the themes and indicated that, following participation, she is no longer sure what willpower is and feels to evoke the term may be an excuse.

Dr Appleton’s response can be found in Appendix N. Overall, she thought the themes identified would connect with Tier 3 weight management service-users. Based on her experience with them, she also suggested they (and therefore also participants) might see willpower as being (i) exhausting, time-limited, difficult to sustain and (ii) “focused on the individual (often neglecting the impact of other biopsychosocial influences on eating and weight management).” However, because the former seemed to be subsumed under subtheme 3.4 (physiological state such as tiredness/energy levels influences willpower) and the latter under subtheme 5.1 (low willpower is centralized as playing a key role in causing unhealthy weight despite the many other causal factors also recognized by participants), the thematic structure went unchanged.

My immersion in the data over time facilitated a more sensitive analysis including themes that were unforeseeable before starting the project. Because I transcribed all interviews myself, I gained an increased familiarity with the data that would have been impossible using a transcribing service. Instead of just summarizing topics (as are sometimes reported in research using thematic analyses) all themes are well developed and reflect

recurring patterns of shared meaning associated with a key organising idea. This thorough analysis lends greater credibility to the findings.

Few qualitative studies have explored understandings of willpower, let alone the understandings of it held by those wishing to change their lifestyle or behaviour. In giving time, space and attention to participants, they were more actively involved in the research process than might have been the case had a quantitative approach been used. Overall, this project achieves the objectives of exploratory research, these being assisting in the conceptualization of its objects of analysis, outlining its features and characteristics, providing clarity and insight, and generating hypotheses. The thematic structure provides a framework making sense of the meanings and understandings that people associate with willpower, suggests further lines of inquiry and has potential clinical and theoretical implications (discussed in the following sections).

23 Theoretical implications

Regarding the quantitative research in the literature review (Mele (2009) and May & Holton (2012)), we might cautiously infer that people view willpower as involving behaving in accordance with one's judgement, one's resolutions or behaving morally. This inference seems to fit with subtheme 1.1 (willpower is conceptualised as self-talk that allows one to resist temptations and to do things that are difficult but beneficial) and is potentially compatible with subtheme 4.2 (low willpower is associated with undesirable qualities, traits and attributes).

Regarding the qualitative research in the literature review, Alexandersen et al.'s (2018) finding that participants believed willpower is promoted by not doubting one will recover fits loosely with subtheme 3.3 (having a sense of self-efficacy helps willpower).

Their finding that willpower is promoted by adopting various strategies to maintain “the spark of life” (p.3996) is compatible with subtheme 3.2 (willpower can be bolstered by strategies and techniques). Their finding that exhaustion, weakness and discomfort undermine it is compatible with subtheme 3.4 (our physiological state influences willpower).

Notwithstanding possible differences between the constructs of willpower and self-control, the results of this project are now compared with Bergen’s results (see Table 2). Bergen’s participants saw self-control as involved in stopping and starting behaviours, making choices, and in guiding behaviour (e.g. moral guidelines or goals). These views were mirrored in subtheme 4.1 (willpower is adaptive and functional - as part of which participants identified willpower as organising and regulating our behaviours and allowing behaviour change to be initiated and sustained) and subtheme 1.6 (willpower is conceptualised as being involved in decision-making and choices).

Bergen’s participants felt self-control is often difficult but can also be easy. This matches to an extent the idea expressed as part of subtheme 2.4 that resisting the temptation of potentially appetitive stimuli is easy if these are perceived as undesirable to begin with. Bergen’s participants felt that loss of self-control and successful self-control can cause both positive and negative emotions, fitting loosely with subtheme 4.2 (low willpower is associated with undesirable qualities, traits and attributes) as part of which participants spoke about how low willpower causes self-criticism and low mood. That participants felt that willpower is influenced by prioritizing or de-prioritizing its use also fits with Bergen’s finding that self-control and self-control failure are influenced by motivation or demotivation to self-control.

Bergen’s participants made various internal attributions for self-control (learning and experience, goals (including using tactics to implement them) and guidelines, and agency and autonomy). These correspond with subthemes 3.2 (willpower can be bolstered by strategies

and techniques, such as setting goals (or perhaps even guidelines)) and 3.6 (willpower is influenced by what we have learned). Their attributions for self-control failure (childhood experiences, lack of resources, loss of agency, disregarding goals, and depleting moods) seem to correspond with subthemes 3.6 (just mentioned) for childhood experiences, 3.1 (prioritizing its use influences willpower) for disregarding goals, and 3.5 (willpower is influenced by emotions and psychological wellbeing) for depleting moods. Bergen's participants also made external attributions for self-control and self-control failure (the environment or situation, external regulation, and consumerism) and felt self-control is socially influenced. These collectively correspond with theme 2 (external factors influence willpower) and its sub-themes.

Bergen's participants reported recovering self-control via three main strategies. This corresponds with subtheme 3.2 (willpower can be bolstered by strategies and techniques). The third of the strategies identified by Bergen's participants (psychologically avoiding the issue altogether for a time) also subtheme 2.4 (the presence or absence of tempting cues and triggers influence willpower).

Subtheme 4.1 (willpower is adaptive and functional) has some parallels with Bergen's finding that people's personal theories of self-control provide a long-term narrative for explaining success and failures of goal-directed striving in that participants expressed the view that willpower was important for success. Bergen's finding that self-control has costs such as emotional inhibition, missed opportunities or feeling constricted loosely corresponds with subtheme 4.3 (willpower is desirable but has downsides). The drawbacks that this project's participants associated with willpower (e.g. obsessiveness, rigidity) might be described as emotional inhibition. Bergen's conclusion that the idea of self-control as a matter of individuality is misleading, and that thinking of it as being shared with others may be more helpful is somewhat compatible with subtheme 2.1 (willpower is influenced by

interpersonal context). It also seems to be mirrored by subtheme 5.1 (low willpower is centralized as playing a key role in causing unhealthy weight despite the many other causal factors also recognized by participants).

Overall, then, there seems to be parallels between how Bergen's participants viewed self-control and how participants in this project viewed willpower. This suggests that either the two constructs describe the same processes, or that the two processes are distinct (although probably overlapping) and that participants were prone to conflating the two or unable to distinguish them. Although it is possible that participants' very efforts to lose weight may have caused their views on willpower to converge with Bergen's participants views on self-control, and they might have seen willpower as distinct from self-control had they not been, this seems far-fetched.

Fitting to a degree with subtheme 1.2 (willpower is conceptualised as a kind of energy, impetus, drive, work ethic, tenacity or power or strength), Cuschieri (2019) reported that her participants' responses mostly supported the idea that "willpower is a trait that strengthens people's personalities and marshals their behaviour towards accomplishments". This also matches subtheme 4.1 (willpower is adaptive and functional) in which people spoke about willpower being important for success. Cuschieri's participants associated willpower with determination, perseverance and motivation. This is not incompatible with views of willpower as a kind of energy, impetus, drive, work ethic, tenacity or power or strength (subtheme 1.2). However, this project's participants tended to view willpower as being distinct from motivation and conceptualised it in diverse ways (theme 1). Cuschieri's participants felt willpower was important in their jobs, according with subtheme 4.1 (willpower is adaptive and functional) in which willpower was associated with success. They also felt willpower can adversely effect people's lives, mirroring subtheme 4.3 (willpower is desirable but has downsides).

Again, notwithstanding possible differences between the constructs of self-control and willpower, Horváth et al. (2015) found that compulsive buyers are aware that tiredness and their emotional state influences their self-control, mirroring subthemes 3.4 and 3.5 (respectively, willpower is influenced by physiological state and by emotions and psychological wellbeing). Their participants used various strategies to implement self-control, mirroring subtheme 3.2 (willpower can be bolstered by strategies and techniques).

Karp (2015) reported that participants recognised that willpower involved a process (which he described as (i) making a commitment, (ii) deciding to act, (iii) dealing with difficult feelings and thoughts and (iv) rewarding or celebrating small victories). The idea of willpower as involving commitment was not especially obvious in the dataset but perhaps pertained most to subtheme 4.1 (willpower is functional and adaptive) in which the idea of willpower as something that helps sustain a course of action (i.e. behaviour change) was alluded to. Part (ii) of Karp's willpower process links with subtheme 1.6 (willpower is conceptualised as being involved in decision-making and choices). Parts (iii) and (iv) seems to reflect subtheme 3.2 (willpower can be bolstered by strategies and techniques).

Snoek (2017) distinguished between different kinds of self-control ((i) intentional, involving doing what one intends, (ii) instrumental, involving achieving goals and (iii) normative, involving living in accordance with one's values). Although this typology could perhaps be transferred to willpower, it seems more plausible that participants think about it as being related only to items (i) and (ii). Arguing they also related it to item (iii) would be harder but not impossible because living in accordance with one's values could perhaps be perceived as a sub-text in their responses. Notwithstanding possible differences between the constructs of self-control and willpower, it could also be argued that Snoek's different categories mirror theme 1 (willpower is conceptualised in different ways) but this is perhaps a bit tenuous. Snoek seems to be describing self-control for different purposes, whereas

interviewees described different ways of conceptualising it. Her argument that investigating capacities of self-control whilst ignoring the individual, their context and history means lapses in self-control cannot be fully understood reflects themes 2 and 3 (willpower is influenced by external and internal factors respectively) but contrasts somewhat with participants' views that willpower is central in maintaining healthy weight (subtheme 5.1). Snoek's suggestion that consideration must be made of the capacity of the person's body to be a vehicle for self-control as both a consequence and cause of lost self-control fits quite well with subtheme 3.4 (willpower is influenced by our physiological state).

Snoek et al. (2016) reported that participants described themselves as being strong willed despite their addiction. Their finding that planning, foresight and strategy predicted recovery reflects subtheme 3.2 (strategies and techniques can bolster willpower). That Snoek's participants understood the benefits of avoiding willpower to resist temptations by instead controlling their environment also fits with this subtheme and subtheme 2.4 (the presence or absence of tempting cues and triggers influence willpower). Snoek et al.'s conclusion that willpower is not primary in effective self-control seems incompatible with subtheme 5.1 (willpower is centralized as playing a key role in causing unhealthy weight despite the many other causal factors they also recognized). The authors felt it "fair to assume" their participants felt willpower involved "action in accordance with one's best judgement and perseverance whether in accordance with values or not" (p.106). This seems to fit with subtheme 1.1 (willpower is conceptualised as self-talk that allows one to resist temptations and to do things that are difficult but beneficial) and arguably also with 4.2 (low willpower is associated with undesirable qualities, traits and attributes).

Overall, some findings seem to fit with some of the research reviewed in section 9. Most obviously, Alexandersen et al., Bergen, Horváth et al., Karp, and Snoek et al. all found participants felt self-control/willpower can be bolstered by strategies and techniques,

matching subtheme 3.2. Alexandersen et al., Horváth and Snoek all found their participants felt self-control/willpower is undermined by tiredness and/or physiological state matching subthemes 3.4 and 3.5. Participants' views that willpower is desirable (theme 4) can perhaps be tenuously linked with Mele but more strongly with May and Holton, Bergen, Cuschieri and Snoek et al..

Other findings seem to fit less well with the articles reviewed. Theme 1 (willpower is conceptualised in different ways) is reflected only in Bergen's research into self-control. However, she did not describe this as a specific finding/conclusion and the ways her participants defined self-control did not closely match the subthemes in theme 1 (unsurprisingly as her findings relate to a potentially different construct). Theme 5 (participants' understandings of willpower are contradictory) seems unique to this project and not paralleled in the literature reviewed. Theme 2 (external factors influence willpower) does not fit well with the findings of Alexandersen, Cuschieri, Horvarth, and Karp whose participants did not strongly emphasise the influence of social or environmental context on self-control/willpower.

The findings should not be taken as evidencing the existence of willpower as unquestionably true or an objective given. Entire societies can be confused about important matters such as smoking, slavery, etc. Consensus does not decide truth and people can lack insight into their mental lives. Rather than taking participants' responses as a source of knowledge regarding willpower itself, they should only be taken as descriptions and clarifications of their understandings of that construct. These understandings may reflect some internal property or mechanism(s) that operates in some conditions but not others but whether this property or mechanism(s) equate to something that could sensibly be termed 'willpower' remains unclear and is unaddressed by this research. Their views, along with my interpretation of them, are probably most sensibly taken as being complex syntheses of

sensations, impressions, and perceptions based upon prior knowledge, theories, concepts etc. Participants' responses may have been shaped by the material 'fact' of willpower but it is equally possible the language in which participants expressed their understandings of willpower might confound a true scientific explanation. This language and understanding may be a reflection of assumptions so deeply embedded in our culture as to be impossible for participants to identify. Nonetheless, with its strong emphasis on personal experience, the findings here provide an alternative narrative about what willpower is and how it operates to the academic models discussed in section 5.

Different aspects of the findings could be interpreted as supporting one or more of the three models of willpower described in section 5 (as well as Mischel's dual-process model, which was not discussed), and simultaneously undermining those models. For example, the view expressed by participants (as part of subtheme 3.4) that willpower varies according to their physiological state (with several participants saying their willpower waned towards the end of the day) gives some support to the 'willpower as a muscle model' and is perhaps less compatible with the idea of willpower as a set of micro-skills. However, this could perhaps just as easily be accounted for if willpower is viewed as value-based decision-making (decision-making is influenced by fatigue). Likewise, participants' view that willpower is involved in decision-making (subtheme 1.6) evidences one model and counter-evidences another, as does participants' belief (expressed in subtheme 3.2) that willpower can be bolstered by strategies and techniques (setting realistic goals, focusing on one's goals, making public commitments to achieve a particular goal, taking small steps, seeking support, giving oneself rewards for successes, planning, anticipating obstacles, identifying triggers for unhealthy behaviour and avoiding them, associating tempting stimuli with aversive outcomes, thinking about how one might feel ten minutes after indulging, distraction, not putting too much pressure on oneself, through practice, repetition and/or building up 'momentum' were

all strategies described explicitly or alluded to by participants). Overall, when related to the three different models described in the introduction, the findings suggest an ambiguous, contradictory picture. This is unsurprising given the contested nature of willpower and that the project was designed not to test hypotheses in relation to any one model but rather to describe and clarify people's understandings of willpower so that new hypotheses could be generated. As such, it will hopefully contribute to theory development, rather than theory testing. Specifically, I am hopeful the findings could point towards ways in which beliefs about willpower, perceived levels of it and the impact of willpower success or lapses on mental state and behaviour could be incorporated into theories that model the causes of excess weight, it's maintenance, treatment and it's phenomenology. It also seems important to account for why participants attribute to willpower a primary role in causing unhealthy weight despite the many other causal factors they recognized. It would also be helpful to understand better why willpower tends not to be discussed with HCPs, and why the responses given by HCPs when it is discussed are perceived as being unhelpful. The mechanisms behind each of the participants' various concepts of willpower could be theorised – why are acts of self-control (i.e. willpower) associated with the experiences (e.g. self-talk, decision-making, adopting a certain mindset) reflected in those conceptualisations? Are any of the experiences reflected in those concepts of willpower causal in acts of self-control/willpower or are they epiphenomena that are mistaken as having a causal role?

For the sake of completeness, it should also be noted that several of the findings provide support for Mischel's dual-process model of willpower/self-control (mentioned, but not discussed in detail in the introduction). In particular, the finding that participants saw willpower as being involved in decision-making and choices (subtheme 1.6) would fit with his model of self-control decisions being influenced by both emotion and cognition, as would the findings that participants saw willpower as being influenced by external and internal

factors (themes 2 and 3, respectively). More specifically, participants' view that willpower is influenced by the presence or absence of tempting cues and triggers (subtheme 2.4), by our physiological state (subtheme 3.4) and by emotions and psychological wellbeing (subtheme 3.5) resonate with the 'hot' part of his dual-process model (fast, automatic, involuntary, inflexible and influenced by emotions, fears, passions and impulses) that Mischel describes as being under stimulus control. Similarly, participants' view that willpower is influenced by prioritizing its use (subtheme 3.1) and can be bolstered by strategies and techniques (subtheme 3.2) seems to fit with the workings of the 'cold' part of his model (that is slower, more flexible and based on cognition, reasoning and rationality) and that can be controlled through thinking and learning.

Arguably, the findings challenge the three models of willpower in that participants have suggested multiple and diverse ways of understanding willpower. According to the participant group as a whole, willpower is simultaneously all and none of the things suggested by the three models. Claiming the findings call into question these three different models assumes that participants' views about willpower are equally valid as those of academics. Only further research can tell whether lay and differing academic accounts of willpower can coexist. Presently, all seem necessary for a full description.

24 Implications for future research

This research has left many questions unresolved. Given the chance to interview again, I would ask (i) why participants think charitably towards others lacking willpower but not of themselves, (ii) whether participants think we have a 'general purpose' resource of willpower versus different resources of it for use across different domains and, if so, then why, (iii) whether participants think one's beliefs about willpower (rather than willpower per

se) might influence one's ability to show self-control and, if so, then why and how, and (iv) if one feels /one has or lacks willpower, what rules for behaving and living follow from each? The first two questions could provide data that would help inform clinical interventions aimed at getting those feeling they lack willpower to treat themselves with greater self-compassion. The third question might provide insight into whether participants are sensitive to the effects of their beliefs about willpower on their self-control performance. If they are not, this would suggest detailed psychoeducation on this topic might benefit people attempting to lose weight. If they are sensitive to these effects, then the question could help identify the beliefs that might need to be addressed with the support of a clinician (i.e. beliefs about willpower that participants associate with low self-control). Investigating why they might hold on to beliefs that they feel undermine willpower would also be warranted. The fourth question could identify unhelpful rules by which service-users conduct themselves for then targeting in the clinic (e.g. rules followed for the sake of good relationships, rules leading to short-term reinforcement but costing longer-term gains, rules followed indiscriminately regardless of their advantages or disadvantages or rules beyond one's control (such as someone who would eat more healthily if only others were kinder to him; Villatte, Villatte & Hayes, 2016)).

But the research also suggests other investigations. The finding that participants understand willpower in different ways (theme 1) suggests inquiry could be undertaken into whether any one way of thinking about willpower (e.g. as an energy) identified in the themes is held by a particular clinical population (e.g. smokers) more frequently or with greater conviction relative to a non-clinical population. If so, then such research might facilitate the identification and targeting in clinical sessions of the specific commonly held but unhelpful narratives about willpower with service-users from those populations. It also suggests inquiry into whether different populations have broader or narrower conceptual repertoires

for thinking about willpower. If yes, such a finding might suggest expansion and elaboration of service-users' conceptual repertoires to allow greater flexibility of thought about willpower where their population has a narrower view of it. Such research could potentially involve gathering slower, more reflective responses (e.g. by self-report), or by assessing brief and immediate implicit cognitions via a computerized methodology. One such computerized approach is the Implicit Relational Assessment Procedure (IRAP; Barnes-Holmes, Barnes-Holmes, Stewart & Boles, 2010). It could be used to measure response times in agreeing or disagreeing with various statements about willpower (e.g. "Willpower can be learned" vs "Willpower cannot be learned"). Faster responses can be interpreted as giving an indication to a person's implicit attitudes about it. Investigating then what kind of responses (slower, more reflective responses versus brief and immediate implicit cognitions) have most predictive utility in different contexts might also be helpful. Villatte, Villatte and Hayes (2016) briefly summarise research exploring how the IRAP can be used by mental health practitioners in clinical assessment.

Another possible area for future research is to explore understandings of willpower held by people who might be described as affected by anorexia or bulimia. Participants felt that willpower was important for weight loss (with some suggesting that high willpower might be associated with unhealthy weight loss) and self-control has been implicated in eating disorders (e.g. Butler & Montgomery, 2005; Fairburn, Shafran & Cooper, 1999; and Steinglass et al. 2012). Given that willpower may influence recovery from anorexia (Tozzi, Sullivan, Fear, McKenzie & Buliksuch, 2003) and eating disorders (Keski-Rahkonen & Tozzi, 2005) such research may have clinical applications.

It might also be helpful to explore whether participants' belief (as expressed in subtheme 5.3) that willpower is inappropriate for discussion with healthcare professionals (HCPs) is held by other populations (e.g. smoking cessation or weight management service-

users), whether this view is shared by HCPs themselves, and if so, why HCPs think thus. Because some participants felt HCPs responses to their complaints of low willpower had been unhelpful, it might also be warranted to (i) investigate HCPs understanding of willpower and see whether they match those of participants or (ii) compare the extent to which HCPs from different disciplines feel confident in supporting clients in strategically and intelligently tackling willpower issues and (iii) to explore the approaches HCPs adopt in doing this. The first might identify clashes of meaning or misunderstandings in clinic, while the second and third could be undertaken using a low cost survey approach and would identify training needs.

Participants believed willpower is influenced by external factors (theme 2). It might therefore be valuable to investigate whether higher sensitivity to context is associated with higher perceived willpower levels and/or more frequent acts of self-control. This would require evaluating awareness of and/or response to contextual influences (e.g. using the Context Sensitivity Index (Bonanno, Maccallum, Malgaroli & Hou, 2020) and how these influence willpower. Such research might provide insight into whether context sensitivity moderates or mediates the effects of other measurable aspects relating to implicit theories of willpower (e.g. fixed versus malleable, or limited versus unlimited) or how they relate, for example, with scores on a self-control scale (e.g. Tangney, Baumeister and Boone, 2004).

Although not directly suggested by the findings, other lines of investigations could follow this study. Because the sample was almost exclusively female, ascertaining whether males having difficulty losing weight share the same understandings as this project's participants would be helpful. Likewise, given the sample was exclusively White British, similar research with people from minority groups would be warranted. It would also be helpful to find out whether participants' views are shared by more specialist weight

management service-users more generally and/or by people who have successfully lost weight and/or who are maintaining a healthy weight despite being prone to gain weight.

25 Implications for clinical practice

The implications of the findings for clinical practice will now be discussed. These are described in relation to the processes of (i) assessment and (initially) engaging clients, (ii) formulation and planning, and (iii) providing interventions because this order reflects the sequential stages of a typical piece of work in clinical psychology.

NICE guidelines for the identification, assessment and management of overweight and obesity in children, young people and adults (2014) recommend no specific psychological therapies other than behavioural therapy. However, they also recommend the inclusion of a range of additional strategies coherent with a CBT approach (e.g. stimulus control, goal setting, problem solving, cognitive restructuring (for adults) and relapse prevention). NICE guidelines for the diagnosis, assessment and management of harmful drinking (high-risk drinking) and alcohol dependence (2011) recommend cognitive behavioural therapies, behavioural therapies or social network (i.e. systemic) and environment-based therapies. NICE guidelines regarding psychosocial interventions for drug misuse in over 16s (2007) recommends contingency management for drug-specific problems and evidence-based psychological treatment (particularly CBT) for comorbid mental health problems. The following discussion regarding the implications of this research for clinical work is therefore oriented toward such approaches (i.e. behavioural therapy, CBT, systemic and environment-based therapies, and contingency management).

25.1 Implications for assessment and engagement

If clinicians are to work compassionately and collaboratively with clients, they must acknowledge and fully understand the accounts clients give for their difficulties, including ‘lacking willpower’. The findings from this research can facilitate more empathic, better-informed, and useful discussions when clients raise the topic of willpower, and thereby reduce the risk that clients feel somehow ignored, unheard or misunderstood. In other words, the insights that this research generates should facilitate client engagement with services so they do not withdraw prematurely.

Participants felt that willpower was inappropriate for discussion with HCPs even though they felt willpower is essential for maintaining a healthy weight. Those who had discussed it tended to have been unhappy with the responses they received. This suggests clinicians should take responsibility for raising and addressing this important topic with service-users at an early stage, and making sure discussions are useful. By giving insight into ways willpower can be understood, this thesis should help clinicians do these things with more confidence. It also suggests that training on how to effectively address clients’ complaints of having low willpower might be useful for some HCPs.

Participants’ belief that willpower is key to initiating and sustaining behaviour change implies that incorporating the concept into theories of behaviour change might increase their relevance and acceptability to service-users. From a systemic perspective, people connect more readily with concepts and theories that are not too different to those they already accept. It is when information is too different to that composing the system of meaning in which people are embedded and from which they make sense that it has less influence (Burnham, 2002; Carr, 2012; and Rivett & Street, 2009). Incorporating willpower into theories of behaviour change might therefore make them more acceptable and therefore helpful to service-users because they will have some familiarity and recognisability.

25.2 Implications for formulation and treatment planning

Given participants felt mood and stress influence willpower, clinicians should try to understand the specifics of these influences for each client. Once these influences have been formulated, tailored interventions can then be delivered to help improve the client's sense of having willpower and thereby better self-control. Alternatively, the finding suggests beliefs about willpower, perceived levels of it and the impact of willpower success or lapses on mental state could all usefully be incorporated along with mood and stress into any existing schematic 'box and arrow' formulation diagrams that attempt to map out the internal and external factors influencing overeating and how they do so (e.g. Cargill, 2015; and Ratcliffe & Ellison, 2015).

Clinicians, service-users and/or families/carers may sometimes disagree as to the extent to which they think the client can exercise willpower. Apart from helping clinicians formulate what might be going on within somebody's inner world, the findings can help clinicians make sense of the interpersonal dynamics between service-users and clinicians (e.g. impasses in therapy or sporadic/intermittent engagement) or those in their immediate circle (e.g. different views about what willpower is, or different emphases on its importance).

With regard to the planning and tailoring of interventions to meet individual needs, various interventions arguably require a degree of willpower and/or self-control in that they involve doing things often experienced as frightening or difficult (e.g. behavioural activation, behavioural experiments, graded exposure, exposure and response prevention, parenting interventions, enhancing adherence to self-care regimes for long term health conditions, exercise, smoking cessation, healthy eating). These can potentially be optimised if clinicians can use the findings as a framework for understanding how individual clients understand willpower and how it influences their difficulties (as just mentioned) but also to open up discussions about willpower and how it may (or may not) influence the efficacy of those

interventions. Such conversations might facilitate other more structured interventions as might be consistent with, for example, a CBT approach (e.g. problem-solving, finding ways to use 'willpower' efficiently and strategically or developing clients' sense of self-efficacy in exercising willpower) or enhancing internal/intrinsic motivation, and exploration of options and decision analysis (from interpersonal therapy)). They might also enhance more non-directive interventions as might be consistent with, for example, certain systemic approaches or principles (e.g. showing curiosity and irreverence to a client's beliefs about willpower or reframing those beliefs in some way).

25.3 Implications for intervention

That participants viewed willpower in various ways suggests they might be unclear how to understand it. As part of a CBT or systemic approach, it might therefore be useful for clinicians to examine with service-users whether they hold contradictions or inconsistencies in their assumptions about it, where differing understandings came from, the advantages and disadvantages of viewing willpower in particular ways, and how beliefs about it might influence their lives. By trying to stimulate thought about willpower, clinicians can facilitate more complex and nuanced understandings of what the term might mean and insight into how beliefs about willpower may affect behaviour perhaps as much as willpower itself might do. Clinicians can use the findings to help people think beyond their frames of reference and expand the context of meaning, ideas and language in which willpower is understood (Rivett & Street, 2009; and Villatte, Villatte & Hayes 2016). This in turn may allow clients to access greater ability to initiate and sustain changes in behaviour. The findings might also be taken as providing a benchmark against which particularly narrow, biased, or unusual beliefs might

be contrasted or a consensus against which someone's beliefs might be normalised or validated, most obviously as part of a cognitive behavioural approach.

That participants viewed willpower as central to maintaining healthy weight suggests clinicians working with challenged client groups (e.g. compulsive gamblers, substance misusers) should draw attention to other factors influencing weight and self-control, discuss with service-users the research indicating that beliefs about willpower may be as influential as willpower per se, and help service-users improve their sense of willpower. That participants reported self-criticism after experiencing low willpower (but without criticising others for the same) likewise suggests biased thinking that could be targeted in therapy, most obviously as part of a third-wave cognitive behavioural approach.

That participants believed willpower can be both increased and decreased by social context suggests clinicians must consider systemic or environment-based therapeutic approaches (see, for example, Nelson & Prilleltensky, 2010) for 'willpower' difficulties. In particular, this finding may help interrupt interpersonal patterns where carers, family or friends absolve themselves from responsibility for influencing a client's self-control by instead blaming that client for lacking willpower. It also implies that clinicians must support service-users to elicit the support of others. Such work might involve assertiveness training, social skills training, family therapies, etc.

That participants believed willpower is influenced by prioritising its use suggests that helping clients connect with their values as an alternative way to sustain motivation might be important. Clarifying values can have several benefits (Villatte, Villate & Hayes, 2016; and Wilson & Murrell, 2004). Behaviours that fit with a deeply held, important, heartfelt value but are unpleasant, painful or difficult to undertake (e.g. abstaining from temptation) can become their own reward once equated with that value (e.g. determination, health). Associating such behaviours or tasks to one's values can transform their meaning - it can help

one stay motivated when things are difficult because doing so acquires a long-term purpose via these associative links (Kanter, Busch & Rusch, 2009; and Villatte, Villatte & Hayes, 2016). The same finding also suggests clinicians must support clients to be aware of “all or nothing” mentalities or black and white thinking. Instead, clinicians can aim to foster alternative and more flexible ways of relating to willpower, food and weight loss (or abstaining from other tempting stimuli). For example, clients could scaffold “I’ll do what I can” or “I’ll do my best/what is helpful” mentalities (Dr Sarah Appleton, personal communication, 2020). Such approaches would fit with CBT, as suggested by NICE in their different guidelines.

That participants centralized low willpower as playing a key role in causing unhealthy weight despite the many other causal factors also recognized by participants suggests that appropriate psychoeducation on willpower and different ways of thinking about it could be given to service-users (to reduce self-blame and shame) or their family, friends and/or caregivers. Doing this could reduce expression of criticism, hostility and disparagement towards those perceived as lacking willpower and would again fit with the various NICE guidelines discussed. Given the concept of ‘willpower’ is largely ignored by clinicians (personal communication: Dr Frank Ryan, chair of the British Psychological Society’s Division of Clinical Psychology Faculty of Addictions, 2018) psychoeducational material on (mis)conceptualizations of ‘willpower’ informed by this research may be useful to service-users. Such information could be useful to users of bariatric services (Dr Sarah Appleton, personal communication, 2019) and could be useful as an adjunct to therapy (Dr Frank Ryan, personal communication, 2018). There is presently little reason to suppose clinicians’ understandings of willpower differ to those of lay people, so disseminating such material may also facilitate non-blaming by clinicians.

Participants felt willpower is boosted by certain strategies and techniques. However, despite this, when asked directly participants had difficulty naming ways in which HCPs might help people increase their willpower. This suggests that clinicians might support service-users to increase their sense of having willpower by sharing self-control and behaviour change strategies and supporting them to implement these strategies skilfully. Self-control training regimes have been described in articles that have been meta-analysed (see Beames, Schofield & Denson, 2017; and Friese, Frankenbach, Job & Loschelder, 2017), but there is no space to discuss these. Such regimes are based on the idea that practicing tasks requiring self-control improves it. They commonly use procedures such as using one's non-dominant hand for everyday tasks, squeezing a handgrip till fatigued, or making conscious efforts to maintain good posture. Alternatively a more 'traditional' but indirect approach (more in line with participants' suggestions, the various NICE guidelines and using approaches clinicians might already be skilled in) could be adopted, such as (i) enhancing motivation through motivational interviewing (Miller & Rollnick, 2012) and/or identifying priorities and values (as discussed above), (ii) using ideas from 'Beckian CBT' such as goal setting, performance monitoring, identifying triggers, problem-solving, (Sanders & Wills, 2005), planning how to respond when faced with temptations or succumbing to them (Ryan, 2013) and (iii) using ideas from '3rd wave CBTs' such as mindfulness training to allow tolerance of discomfort (Bennett & Oliver, 2019), attention training (Wells, 2011), self-compassion and acceptance in the face of setbacks (Gilbert, 2010), etc. Although not suggested by this project, seeing whether a traditional CBT skills-based approach is more helpful to service-users than a self-control training regimen would be fascinating.

That participants reported self-criticism after experiencing low willpower suggests compassion-focused approaches (Gilbert, 2010) might be important for service-users who perceive themselves as lacking willpower. Such self-criticism can prevent service-users

prioritising their own self-care of needs. This in turn can block positives changes to health and lifestyle (Dr Sarah Appleton, personal communication, 2020).

The findings may even begin to counter judgmental or stigmatising attitudes held by clinicians (as described by Park, Berkwitt, Tuuri, & Russell, 2014) towards people they view as lacking willpower. By improving understanding of and empathy towards such clients the findings can uncloud clinical judgement and reduce emotional bias in clinical decision-making, thereby improving care provision and outcomes. For example, because participants felt low willpower was primary in causing unhealthy weight, this may cause readers of this research to see those battling with weight loss as unduly putting themselves under pressure, rather than lacking something or being lazy. By helping to mediate clinicians' 'emotional temperature' in relation to 'low willpower' clients (whether by correcting attributional biases or minimizing counter-transference) these findings serve to make them less likely to stereotype, project, act-out or become unconsciously punitive (e.g. helpers becoming "helpless" or avoidant, inappropriately confronting clients, adopting a moralising tone, weaving a moralising sub-text into their communications with clients, apportioning all responsibility for recovery onto the client or becoming less effortful when diagnosing/formulating, documenting, and/or providing treatment (Groves, 1978; and Park, Berkwitt, Tuuri, & Russell, 2014)). Instead, this thesis should help sustain clinicians' curiosity (an essential quality, according to Cecchin (1987)) about clients' supposed lack of willpower rather than stopping inquiry after making characterizations of 'low willpower'.

Overall, the findings can facilitate assessment, engagement, formulation, treatment planning and intervention. They allow and/or encourage clinicians to (i) include and respect service-users own terminologies, (ii) be curious about the ways in which service-users understandings of willpower might be inconsistent or contradictory, (iii) think together with service-users about how understandings of willpower might influence the efficacy of

interventions (iv) introduce and explain alternative conceptualizations of ‘willpower’ to service-users and (v) work to reduce self-blame or self-criticism in relation to willpower.

26 Conclusion

“A hypothesis tries to explain some particular something but an explanatory principle – like gravity or instinct – really explains nothing. It’s a sort of conventional agreement between scientists to stop trying to explain things at a certain point” (Bateson, 2000, p.39). It can be argued that the concept of willpower is an explanatory principle that says ‘Stop, look no further!’ rather than providing genuine explanation. In other words, the phrase ‘punctuates’ efforts to make sense of health-related behaviours with a ‘full stop’. Labels of ‘lacking willpower’ (or having it) can easily be taken as settling or finalising matters permanently, definitively, conclusively, once and for all. Consequently, curiosity about what might be influencing behaviour is replaced with a coherent but potentially spurious label that is fixed, irrevocable and totalizing. These labels might be seen as conclusions or ‘conversation-stoppers’ rather than ideas that facilitate new conversations, their continuation, evolution, or progression (Haydon-Laurelut, 2019) or that emphasise, as Bruner states, “the fact that many worlds are possible, that meaning and reality are created and not discovered” (cited in Sluckin, 1999, p.22).

This research aimed therefore to restore curiosity about the meaning of the term ‘willpower’ and to open up conversations by exploring what sense is made of the term and its meaning to people having difficulty in losing weight. Whether it is proper for clinicians and researchers to continue using that term is unclear and can perhaps best be determined by clarifying its basic definitions and how it differs from self-control, by establishing various different kinds of validities of the term (e.g. face, construct, concurrent, criterion-related) and

neurological or biological correlates of willpower (and beyond controversy, as is currently the case) and with further research.

For the time being, this project has given those finding weight loss difficult an opportunity to be more fully understood and to contribute to the willpower research programme from their own standpoint. In doing so, some of the assumptions, ideas and theories that are involved when people label themselves and others as lacking willpower have been made explicit and therefore rendered questionable (which is important if the idea of willpower helps recruits people into perpetually policing and judging themselves) and open to further research. The project has also produced findings that should help improve the treatment of people who are struggling to lose weight (and possibly others who might be perceived as lacking willpower), and the practices of healthcare staff and researchers. In particular, the finding that many different understandings of willpower are possible gives hope that people need not get stuck in thinking about it in only one way. The doubt and uncertainty about willpower that this research encourages should be celebrated as useful. It encourages us to become less attached to the deeply rooted idea of willpower, more flexible and creative in our thinking and to remain constructively critical of and curious about it.

In both psychological and everyday discourse people use constructs such as willpower to understand and explain themselves and each other, but these constructs can be problematic if taken as real, objective entities. This project has provided a new perspective on willpower simply by attempting to understand it in a different way (rather than trying to explain anything) and in doing so it has positioned willpower as something that cannot be simply taken for granted. The findings have been grounded in people's everyday lived experiences of willpower and therefore have an authenticity, validity and authority that differs from and can perhaps be respected as equal to findings generated by other approaches. They will hopefully help sustain interest in the topic of willpower (and scrutiny of it), while promoting

the use of qualitative methodologies and mixed-method strategies to investigate subjective understandings and experiences of willpower as an alternative to the quantitative paradigm.

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APPENDIX A: Results from critical appraisal tool questions to the qualitative articles included in the literature review

Author	Was there a clear statement of the aims of the research?	Is a qual methodology appropriate?	Is it worth continuing?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that addressed the research issue?	Has the relationship between researcher and participants been adequately considered?	Have ethical issues been considered?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?
Alexandersen et al., 2019	Yes	Yes	Yes	Method was not described clearly	Yes	Yes	Not discussed	Yes	Apparently not	Yes	Not valuable. The construct of willpower is taken for granted, rather than questioned. How do we know the participants have willpower - because of the things they say. And why do they say the things they do? Because they have willpower. Lots of unsubstantiated claims. Not a single extract used to substantiate their claims even mentioned the word 'willpower' or the phrase 'inner strength' to which they often referred.. Also the research seems only to be informed by a strength/resource model of willpower and no reference is made to other ways of conceptualizing willpower. The reason for using hermeneutic-phenomenology was not given. The factors that might increase willpower seem to be the kind of things compassionate and thoughtful healthcare professionals would do anyway, the the factors identified as possibly inhibiting it seemed to be either out of clinician's controls (nightmares) or already a target for intervention (discomfort). Although hermeneutic phenomenology might embrace meanings, as a thought experiment I tried replacing the word 'willpower' with 'Chi energy' while reading the results and discussion and the results still made a very similar sort of sense.
Bergen	Yes	Yes	Yes	Yes	Yes	Yes	Not discussed	Not discussed for study 2	Yes	Yes	Valuable - it is very detailed, and coherent. Useful for theory development
Cuschieri	Yes	Yes	Yes	Method was described in minimal detail. No justification as to why grounded theory was chosen - and whether it	20 Interviews with people from 20 countries from 5 continents. Sample was 'random' but made as 'international	A couple of 'irrelevant' questions. Maybe other methods could have been used to look at the effects	Not given discussion	No - Only one mention of the word 'ethics'	No - Methods was not discussed. Grounded theory was mentioned, but only thematic findings were presented.	Yes, but I feel that at times the data presented does not support the claims presented. No discussion of the evidence against the	Little value - The research is very uncritical about the value of the 'term' willpower. The methodology was weak. Minimal recommendations for further research.

Author	Was there a clear statement of the aims of the research?	Is a qual methodology appropriate?	Is it worth continuing?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that addressed the research issue?	Has the relationship between researcher and participants been adequately considered?	Have ethical issues been considered?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?
				was used at all as the results are thematic	as possible'	of culture on leadership - e.g. quantitative, multiple regression. No questions about culture were directly asked either!			No discussion of how themes were derived. Insufficient data was at times presented to support the findings. Positionality was given very scant treatment	findings or about methodological limitations	
Karp	Yes	Yes	Yes	Study 1 – excluded from review Study 2 - excluded from review. Study 3 - yes interviews are appropriate, but no discussion of how they were analysed	Not specified	Interview schedule not provided	Not discussed	No	No discussion of how interviews were analysed. No discussion of how the survey questionnaire was tested (although it was).	Yes	This article seemed badly written.. There are three studies. The first is published elsewhere and says nothing conclusive about WP. Rather WP is put forward as a hypothesis to explain and interpret the results of that study. Study 2 seems to be a load of nonsense. There is a survey approach. An untested? questionnaire was used that 'examines factors influencing willpower strength'. There is 'correlation' between the results of this survey (now willpower strength) and social position and status (although it is not clear how the latter was quantified, although it must have been, given that Pearson's R was measured). Again, the tautological logic seems to be at play - how do we know leaders have high willpower? Because they say so. But why are they leaders? Because they have high willpower. Study 3 involved in depth interviews. The questions were not provided. The method for analysing the data was not named. That said, the findings are interesting, and do seem to match at times with my own findings. The paper seems to draw heavily and uncritically on the strength model of willpower and seems to be rather badly researched. It is full of unsubstantiated assertions and they create a false(?) connection between Freud and Baumeister's idea of ego depletion. The author draws only on Baumeister's popular book,

Author	Was there a clear statement of the aims of the research?	Is a qual methodology appropriate?	Is it worth continuing?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that addressed the research issue?	Has the relationship between researcher and participants been adequately considered?	Have ethical issues been considered?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?
											rather than any of his academic writings. It's also funny because he describes a lot of characteristics of leadership that are suggested by the survey, all of which seem to make the concept of willpower itself redundant and unnecessary.
Snoek 2017	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Valuable - it is very detailed, and coherent. Useful for theory development. It also concludes with a long list of recommendations for assessing loss of self-control in addiction, for treatment and for policy development
Snoek, Levy & Kennett	Yes	Yes	Yes	Yes	Yes	Yes	Not discussed	Yes	Yes	Yes	Yes, this is really helpful

APPENDIX B: Questions taken from How to Design and Report Experiments (Field, 2003), used to appraise May & Holton's experimental studies in the literature review.

	May & Holton experiment 1	May & Holton experiment 2	May & Holton experiment 3
Who were the participants?	97 subjects from around the University of California	274 students from various different disciplines and 3 different universities	117 students were recruited from a critical thinking course, at the University of California.
Can we be confident that the different experimental groups were the same to begin with?	Reasonably confident. Random assignment was used, although there was no demonstration that the groups were the same	Reasonably confident. Random assignment was used, although there was no demonstration that the groups were the same. The group was different to that used in study one and three	Reasonably confident. Random assignment was used, although there was no demonstration that the groups were the same.
Is it possible that participants behaviour may have changed simply due to the passage of time rather than the experimental manipulation?	Not applicable	Not applicable	Not applicable
Is it possible that interfering events may have influenced the	Not applicable	Not applicable	Not applicable

	May & Holton experiment 1	May & Holton experiment 2	May & Holton experiment 3
results rather than the experimental manipulation?			
Is the maturation of participants responsible for the results?	Not applicable	Not applicable	Not applicable
Are the drop-out rates between the groups different? If yes, this could account for the findings?	Not applicable	Not applicable	Not applicable
Could the change in a between pre- test and post-test be a reaction to the pre-test?	Not applicable	Not applicable	Not applicable
Is there a risk of experimenter effects?	No	No	No
Have blind or double-blind procedures been used?	Not needed	Not needed	Not needed
Could there be reactivity of measurement, where the act of measuring changes the thing	Unlikely	Unlikely	Unlikely

	May & Holton experiment 1	May & Holton experiment 2	May & Holton experiment 3
being measured?			
Might participants show apprehension about being evaluated?	Unlikely	Unlikely	Unlikely
Could there be practice or fatigue effects?	No	No, assuming that participants in study 2 were not involved in study 1. Even if they were there seems to have been a time lag between studies	No, assuming that participants in study 3 were not involved in study 2 and/or 1. Even if they were there seems to have been a time lag between each study
Is there an over-use of special participant groups?	Only students participated	Only students participated	Only students participated
Could the results be attributed to measurement error or regression to the mean?	No	No	No
Have the measuring tools changed in any way over the course of the experiment?	The experimenters acknowledge that the difference in stimulus materials used between groups could confound the results	The experimenters acknowledge that the difference in results from study 1 could be attributable to the stimulus materials in this study having no moral valence unlike	

	May & Holton experiment 1	May & Holton experiment 2	May & Holton experiment 3
		those in the first	
Was a between- groups, within- groups or repeated measures design appropriate?	Between-groups was appropriate	Between-groups was appropriate	Between-groups was appropriate
Was the appropriate design used?	Yes	Yes	Yes

APPENDIX C: Questions taken from the How to Read a Paper (Greenhalgh, 2001), Chapter 13 (entitled ‘Papers that report questionnaire research), used to appraise Mele’s survey-based studies in the literature review.

	Mele (2009), study 1	Mele (2009), study 2	Mele (2009), study 3	Mele (2009), study 4
What was the research question, and was the questionnaire appropriate for answering it?	How do lay people understand the notion of ‘weakness of will’?	How do lay people understand the notion of ‘weakness of will’?	How do lay people understand the notion of ‘weakness of will’?	How do lay people understand the notion of ‘weakness of will’?
Was the questionnaire used in the study valid and reliable?	Not investigated or discussed	Not investigated or discussed	Not investigated or discussed	Not investigated or discussed
What did the questionnaire look like, and was this appropriate for the target population?	A single written question: “What is weakness of will? Please answer this question and briefly provide one example of weakness of will”	Two descriptions of weakness of will were given, and participants were asked to specify which was more accurate or whether both were equally accurate	Participants were provided with a single written vignette, and asked to rate on a seven-point Likert scale ranging from strongly agree to strongly disagree whether they felt the protagonist	Participants were provided with a single written vignette, and asked to circle a ‘yes’ or a ‘no’ response as to whether they felt the protagonist showed some weakness of will in that story.

	Mele (2009), study 1	Mele (2009), study 2	Mele (2009), study 3	Mele (2009), study 4
			showed some weakness of will in that story.	
Were the instructions clear?	Yes	Yes	Asking participants to indicate whether they felt the protagonist showed 'some' weakness of will may have made the results more ambiguous.	Yes
Was the questionnaire adequately piloted?	No	No	No	No
What was the sample?	72 undergraduates at Florida State University	119 undergraduates at Florida State University	25 undergraduates at Florida State University	100 undergraduates at Florida State University
How was the questionnaire administered, and was the response rate adequate?	Pencil and paper questionnaire. Response rate was adequate	Pencil and paper questionnaire. Response rate was adequate	Pencil and paper questionnaire. Response rate was adequate	Pencil and paper questionnaire. Response rate was adequate
How were the data analysed?	Not specified	Simple descriptive	Simple descriptive	Simple descriptive

	Mele (2009), study 1	Mele (2009), study 2	Mele (2009), study 3	Mele (2009), study 4
		statistics	statistics	statistics
What were the main results?	11 students (about 15%) mentioned doing something that one knew or believed that one should not do. The remaining responses were provided as a footnote	49% chose the response indicating that weakness of will involved doing something that one knows that one should not do, while 33% chose the response indicating that it involves doing something that one has decided or intended not to do	80% of participants agreed with the assertion that the protagonist (who had acted contrary to his judgement but not his intention) had showed weakness of will	73% of participants agreed with the assertion that the protagonist (who had acted contrary to his judgement but not his intention) had showed weakness of will
What are the key conclusions?	Unclear	Weakness of will involves acting either against one's judgements or against ones resolutions	The ordinary notion of weakness of will involves considering people as weak willed if they do things counter to their judgement	The ordinary notion of weakness of will involves considering people as weak willed if they do things counter to their judgement

	Mele (2009), study 1	Mele (2009), study 2	Mele (2009), study 3	Mele (2009), study 4
			even if it does not involve doing things counter to their resolutions	even if it does not involve doing things counter to their resolutions

APPENDIX D: Depiction of article selection procedure for this project's literature review

Articles retrieved from databases = 538 (Scopus = 228, Web of science = 305, NDLTD = 0, Opengrey = 0, OATD = 0 and Google Scholar = 5)	N = 538
↓	
Duplicate items excluded = 316	N = 222
↓	
Articles excluded for their focus on limited versus nonlimited implicit theories of willpower using a qualitative approach or because they were reviews of this literature (n= 27)	N = 195
↓	
Non-research articles excluded= 5	N= 190
↓	
Articles excluded because their titles, abstracts and/or content indicated no irrelevance to this project =186	N = 4
↓	
Articles excluded because participants were pre-schoolers = 1	N = 3
↓	
Articles included from informal literature search for thesis proposal (2), from corresponding with authors (1), and from reading the reference lists of included articles (3) = 6	N = 9
↓	
Articles included in review	N = 9

APPENDIX E: Participant information sheet

INFORMATION SHEET FOR INTERVIEW RESEARCH WITH PEOPLE STRUGGLING TO LOSE WEIGHT

I would like to invite you to take part in a research study.

Before you decide whether or not to participate, please be sure to understand why the research is being done and what it would involve for you. Please take time to carefully read the following information. Feel free to contact me (my details are below) to ask questions if anything you read is unclear or if you would like more information. Please also take the time to think carefully about whether or not to participate.

WHO I AM AND WHAT THIS STUDY IS ABOUT

My name is Oliver Crofton and I am a trainee clinical psychologist at the University of Essex.

I am doing this study as part of my doctorate in Clinical Psychology. It is hoped that the research will produce new information that might be helpful to others who struggle with certain difficulties, particularly weight loss.

The purpose of the research is to explore how people who are struggling to lose weight understand the concept of 'willpower'. It does not matter how little or how much participants might weigh, or how much 'willpower' they think they might have as long as they feel that they are struggling to lose weight.

WHAT WILL TAKING PART INVOLVE?

Taking part will involve a face to face interview which will last for about an hour. Interviews will take place at the University of Essex or possibly a public place of your choosing. All interviews will be recorded using a voice recorder. This recording will be transferred to a secure drive on the university computer and then the recording on

the voice recorder will be destroyed. The interview will be transcribed, but your details will be anonymised. The research will hopefully be published in a scientific journal. This may mean that some of the things you say are published in a transcribed but anonymised form.

As a token of gratitude, participants will be given £10 in Amazon vouchers as thanks for their participation.

WHY HAVE YOU BEEN INVITED TO TAKE PART?

Attendees at Slimming Word have been selected for participation because they are seen as people who will be likely to give useful information for the purposes of the research.

DO YOU HAVE TO TAKE PART?

You do not have to take part in the research. Participation is completely voluntary and a matter of personal choice. You can refuse to participate, or refuse to answer any questions during the interview, or you can decide to withdraw from the interview at any point without any repercussions.

WHAT ARE THE POSSIBLE RISKS AND BENEFITS OF TAKING PART?

If you participate there is some risk that you may at times come to feel upset. If you do please let me know and we can take a break or stop the interview.

However, there is also the possibility that you may come to think more deeply about some of your health-related behaviours and come to question some of your assumptions about yourself.

It is hoped that your participation in the research may ultimately be beneficial to others who are struggling with mental and/or physical health issues.

WILL PARTICIPATION BE CONFIDENTIAL?

Interview transcriptions will be anonymized by replacing participants names with false names. No information that might lead to the identification of participants will be included in the results section of this research. Steps will be taken to disguise such information to reduce the chances of participants being identified.

However, confidentiality will be broken if I have strong concerns that there is a high risk of harm or danger to either you as a participant or any another individual or if a serious crime has been committed. I will inform you if that seems necessary.

HOW WILL THE INFORMATION YOU PROVIDE BE RECORDED, STORED AND PROTECTED?

Interviews will be recorded using a digital voice recorder. The recordings will be transferred to an encrypted memory stick immediately after the interview and deleted from the digital voice recorder. Interviews will then be transferred as soon as possible to the researcher's secure drive at the university. Recordings will be deleted from the digital voice recorder once they are stored on the secure university drive. All material will be destroyed once the study is completed.

Interview transcriptions will be anonymized by replacing participants names with false names.

Any information that might lead to the identification of participants will be discussed with supervisors before inclusion in the results section of this research. If necessary, steps will be taken to adjust such information to reduce the chances of participants being identified.

WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?

This research will be primarily written as an academic assignment. Results would therefore be disseminated by making the thesis available on-line, and through publication in academic journals (but at present no particular journals have been identified as candidate publishers). It is also possible that the results could be disseminated at relevant conferences and symposia or at any universities or service user groups who express an interest in hearing about the research. The finished thesis will also be made available on-line part of my ResearchGate profile. Other methods of disseminating the research electronically through 'virtual' research networks will also be explored.

It is also hoped that any useful information that is gathered might be feedback to Weight Watchers and Slimming World service users and staff, and potentially also local services that might find this information to be helpful.

WHO SHOULD YOU CONTACT FOR FURTHER INFORMATION OR IF YOU WISH TO MAKE A COMPLAINT?

My email address is oc17181@essex.ac.uk and my mobile phone number is 07984 453 057.

My first supervisor is Dr Frances Blumenfeld who can be contacted by emailing fblume@essex.ac.uk

My second supervisor is Dr Ben Donner who can be contacted by emailing b.donner@essex.ac.uk

Thank you

Oliver Crofton

APPENDIX F: Interview questions

Interview Schedule – Willpower study

1. Broad look at behaviour change

- Why would someone want to change their behaviour?
- How do people change their behaviour?
 - *What do you think is important in making change happen?*
 - *What makes change happen?*
 - *What things do people have to do in order to change?*

2. General view of willpower

- What is willpower?
- Is willpower important?
- Where do you think it comes from?
 - *Might be an ability / trait / result of effort / a skill*
- Do you think there is something inside you that impacts it?
 - *This might include genetics / body chemistry / born that way / biological or health factors*
- Do you think your past experiences impact it?
 - *This might include how you were brought up / family / relationships / achievements / education*
- Do you think your current life circumstances influence it?
 - *This might include wealth / good job / current family / support / general health*

3. Willpower as a changing attribute

- Do you think willpower varies over time and what do you think might cause this?
 - *Give examples / any times in your life when you have more?*
- What do you think improves willpower?
- Do you think willpower can be learnt?
- What do you think makes your willpower worse?
- What does not having willpower look like?

4. The value of willpower

- Do you think having willpower is a good thing?
- Do you think having willpower is/could be helpful in your life?
 - *Please give examples...*
- Do you think a lack of willpower is a bad thing?
- Do you think willpower can be unhelpful in your life?

- *Please give examples...*

5. Willpower as a concept

- Do you think willpower is different from motivation?
 - *How so? / what is the main difference?*
- Do you think willpower is different from having discipline?
 - *How so? / what is the main difference?*

6. Willpower and weight loss

- What causes people to be overweight?
 - *Overeating / poverty and cheap food / no time / office work / no exercise / mental health / low education / the camera / bad ingredients / inequality*
- Do you think willpower is important for losing weight?
 - *Why? / Why not?*
- How important is a lack of willpower in causing weight gain compared to all the other things you mentioned?
- How important do you think willpower is for losing weight compared to other things that might be important?
- Are there other things relevant to losing weight?
 - *Please list them / think broad to the specific*
- Do you think your sense of having or not having willpower influences what you eat?
 - *In what way and how?*

7. Willpower and mental health

- If you feel that you lack willpower, how do you think your sense of lacking willpower influences your mental wellbeing (in terms of your self-esteem, self-confidence, self-respect and the kinds of thoughts you have about yourself)?
 - *When you think that you lack willpower what kinds of thoughts or feelings about yourself follow from that?*
 - *How does your sense of willpower influence what you eat.*
- Have other people told you that you lack willpower? How did that effect your sense of self and your wellbeing?
- How do you view other people who cannot lose weight?

8. Willpower and health services

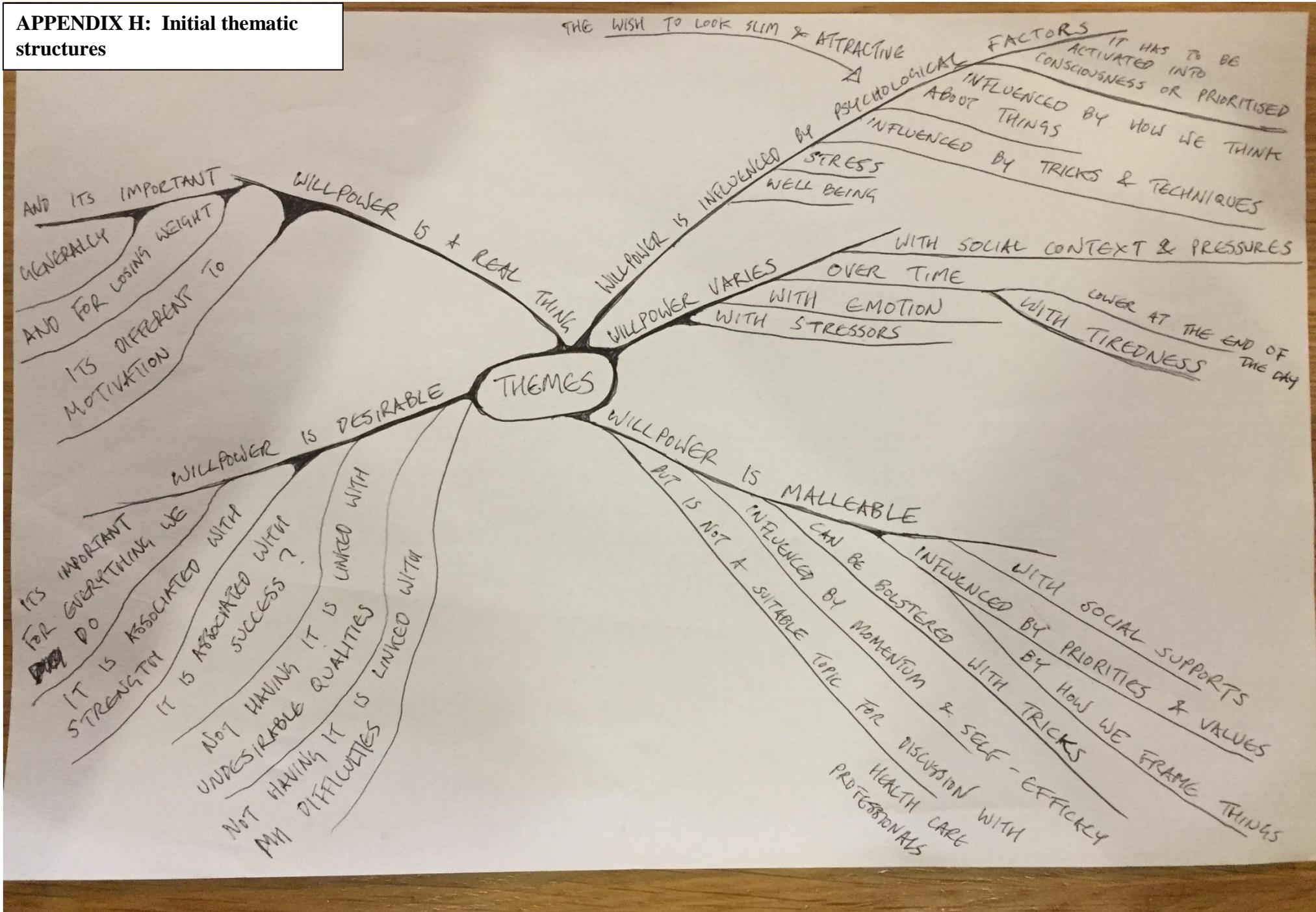
- What kind of support (from services and health care professionals **or family or friends**) do you think might help people boosting their willpower?
 - *Why do you think that?*
 - *What might health care professionals do to help people develop or build their resources of willpower?*

- **Do you ever discuss willpower or lacking willpower directly with people who might help you to make changes?**
 - **If yes:** How often and what do you say? What kinds of responses have you had from services? Have the responses been helpful.
 - **If not:** Why not?

APPENDIX G: Example interview transcription extract

- 78 Interviewer: Right. Okay. Erm so what what do you think willpower is? What is it?
- 79 Participant: Difficult if if I had to describe willpower in one word it'd be difficult
- 80 Interviewer: Yeah
- 81 Participant: Isn't it your ability to do something and to continue doing it and to continue
82 doing it through hardship see if you were to talk about a diet for example my
83 willpower would be to commit to the diet continue dieting go out for dinner
84 and still have a good dinner that would be healthier than having a burger and
85 chips that I actually want
- 86 Interviewer: Okay
- 87 Participant: Yeah so continued determination and commitment to something
- 88 Interviewer: Okay
- 89 Participant: Difficult
- 90 Interviewer: Are you saying its difficult to fine difficult to find or difficult to define?
- 91 Participant: Difficult to have willpower yep
- 92 Interviewer: Are are you saying you found it quite easy to define?
- 93 Participant: Yeah I think I think its quite easy to define willpower
- 94 Interviewer: Yeah? Okay. So do you think willpower is important?
- 95 Participant: Massively
- 96 Interviewer: Yeah?
- 97 Participant: Yeah in everything you do
- 98 Interviewer: Like can you say a bit more about that?
- 99 Participant: Yeah so so I wanna at the moment I'm trying to do this HIT training thing
100 through my like for my injury

APPENDIX H: Initial thematic structures



UNDERSTANDINGS OF WP ARE CONTRADICTORY

WP IS A FUZZY CONCEPT OR AN AD-HOC CONCEPT

WP IS NOT A SUITABLE TOPIC FOR GP CONSULTATIONS

PEOPLE STRUGGLED TO ARTICULATE MEANINGFUL WAYS IN WHICH WP CAN BE IMPROVED BY HCP'S

THEMES

WILLPOWER IS DESIRABLE

IT'S IMPORTANT FOR EVERYTHING WE DO ASSOCIATED WITH STRENGTH

LOW WILLPOWER IS LINKED WITH UNDESIRABLE QUALITIES

WILLPOWER IS INFLUENCED BY INTERNAL FACTORS

- STRESS
- WELL BEING
- TIREDDNESS
- EMOTION
- HORMONES
- KNOWLEDGE
- SELF-EFFICACY
- TRICKS
- TECHNIQUES

WHETHER OR NOT IT HAS BEEN ACTIVATED INTO CONSCIOUSNESS BY HOW WE FRAME THINGS HOW BADLY WE WANT IT

WILLPOWER IS INFLUENCED BY EXTERNAL FACTORS

- PEER PRESSURE
- EXTERNAL STRESSORS
- CELEBRATIONS, RITUALS & HOLIDAYS
- THE PRESENCE OF CONTEXTUAL CUES
- THE SUPERMARKETS
- THE WEATHER
- THE SEASONS
- SOCIAL SUPPORTS

WP CAN BE CONCEPTUALISED IN DIFFERENT WAYS

- A MATTER OF MIND SET
- A KIND OF ENERGY
- A MATTER OF HABIT OR FLOW-STATE

SAY TO THE ABILITY TO TEMPTATIONS TO MAINLY AS SELF TALK AS A MATTER OF RESPONSIBILITY ?? OFTEN CONTRADICTORY

THEMES

WILLPOWER IS IMPORTANT FOR EVERYTHING WE DO

WILLPOWER IS ASSOCIATED WITH STRENGTH

LOW WILLPOWER IS ASSOCIATED WITH UNDESIRABLE QUALITIES

DESIRABLE IS ASSOCIATED WITH SUCCESS & ACHIEVEMENT

INFLUENCED BY INTERNAL FACTORS

OTHER

- HORMONES
- TIREDFNESS
- POOR HEALTH

PSYCHOLOGICAL

STRESS

TRICKS & TECHNIQUES

PRIORITIES

HOW WE THINK ABOUT THINGS

INFLUENCED BY EXTERNAL FACTORS

UPBRINGING / FAMILY HISTORY

SUPER MARKETS

EXTERNAL STRESSORS

CULTURAL CELEBRATIONS

THE SEASONS

PEER PRESSURE

SOCIAL SUPPORT

WP CAN BE CONCEPTUALISED IN DIFFERENT WAYS

- STATE
- A MATTER OF HABIT OR FLOW
- A MIND SET OR FUEL
- A KIND OF ENERGY

TO SAY "NO" TO TEMPTATIONS

THE ABILITY

MAINLY AS SELF-TALK

ANGEL & DEMON WHISPER

WILLPOWER IS TAKEN-FOR-GRANTED IN EVERYTHING PEOPLE SAY AND YET NO ONE CAN SAY AND IT IS!! AND IT IS VERY MALLEABLE!

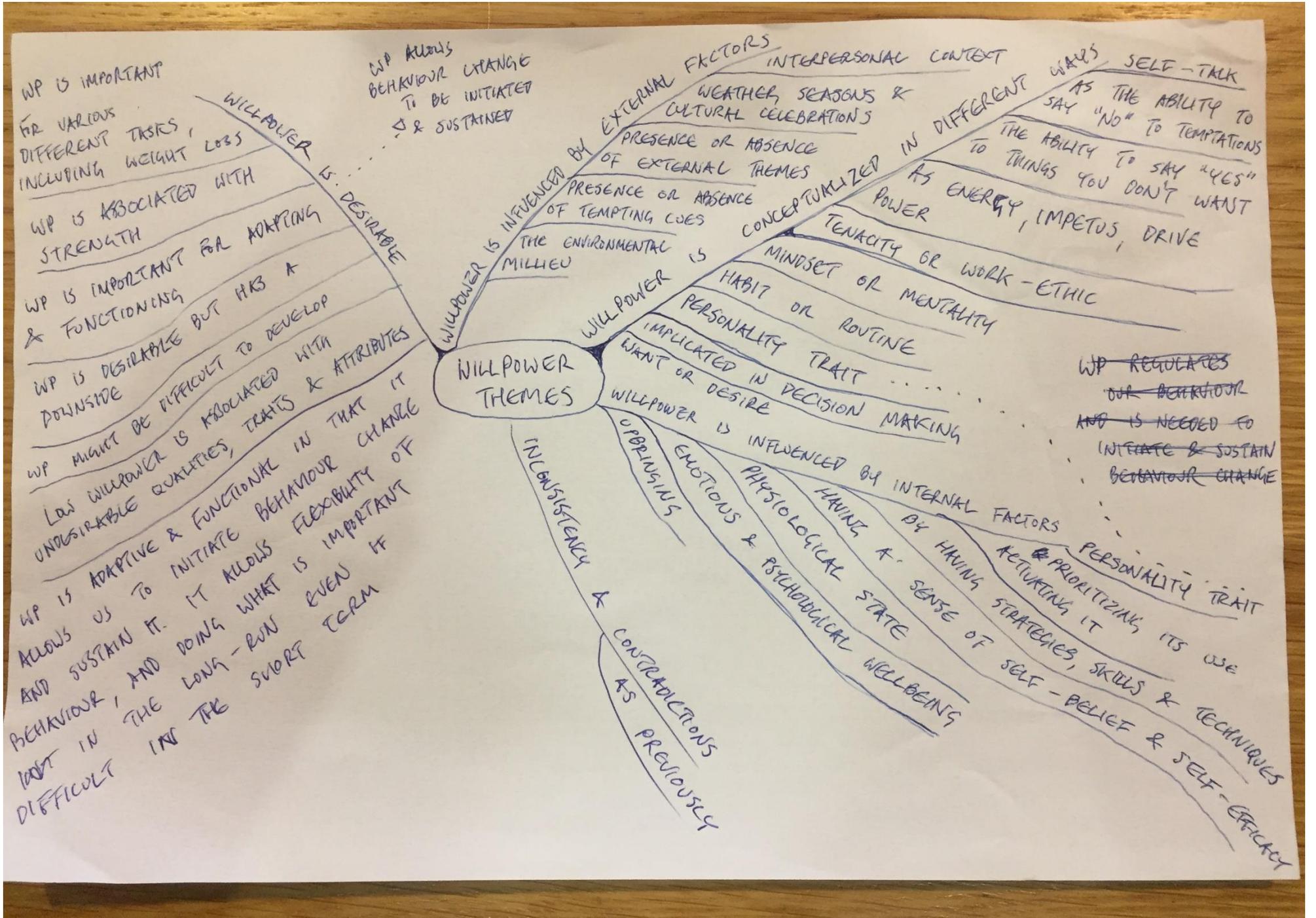
CONTRADICTIONS IN HOW WP IS VIEWED

ALTHOUGH WP IS IMPORTANT FOR WEIGHT LOSS, THERE ARE BARRIERS TO GETTING MEANINGFUL HELP WITH WP

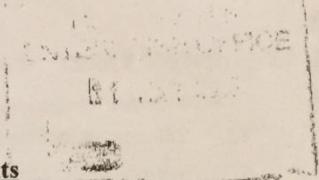
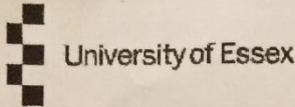
ALTHOUGH PEOPLE ARE NON-JUDGMENTAL TOWARDS OTHERS WHO MAY LACK WILLPOWER, THEY ARE CRITICAL OF THEMSELVES

PEOPLE CAN IDENTIFY MULTIPLE FACTORS CONTRIBUTING TO BEING AN UNHEALTHY WEIGHT, BUT DESPITE THIS THEY CENTRALIZE WILLPOWER AS BEING VERY IMPORTANT

LOTS OF DIFFERENT CONCEPTS AND DRAWN UPON, OPEN IN COMBINED INCONSISTENT WAYS



APPENDIX I: Approved application for ethical approval of research involving human participants from University of Essex



Application for Ethical Approval of Research Involving Human Participants

This application form must be completed for any research involving human participants conducted in or by the University. 'Human participants' are defined as including living human beings, human beings who have recently died (cadavers, human remains and body parts), embryos and fetuses, human tissue and bodily fluids, and human data and records (such as, but not restricted to medical, genetic, financial, personnel, criminal or administrative records and test results including scholastic achievements). Research must not commence until written approval has been received (from departmental Director of Research/Ethics Officer, Faculty Ethics Sub-Committee (ESC) or the University's Ethics Committee). This should be borne in mind when setting a start date for the project. Ethical approval cannot be granted retrospectively and failure to obtain ethical approval prior to data collection will mean that these data cannot be used.

Applications must be made on this form, and submitted electronically, to your departmental Director of Research/Ethics Officer. A signed copy of the form should also be submitted. Applications will be assessed by the Director of Research/Ethics Officer in the first instance, and may then be passed to the ESC, and then to the University's Ethics Committee. A copy of your research proposal and any necessary supporting documentation (e.g. consent form, recruiting materials, etc) should also be attached to this form.

A full copy of the signed application will be retained by the department/school for 6 years following completion of the project. The signed application form cover sheet (two pages) will be sent to the Research Governance and Planning Manager in the REO as Secretary of the University's Ethics Committee.

1. Title of project:

A QUALITATIVE EXPLORATION OF THE UNDERSTANDINGS OF THE TERM 'WILLPOWER' HELD BY PEOPLE WHO ARE STRUGGLING TO LOSE WEIGHT

2. The title of your project will be published in the minutes of the University Ethics Committee. If you object, then a reference number will be used in place of the title.

Do you object to the title of your project being published? **No**

3. This Project is: **Student Project**

4. Principal Investigator(s) (students should also include the name of their supervisor):

Name:	Department:
Oliver Crofton	School of Health and Social Care
Dr Frances Blumenfeld	School of Health and Social Care
Dr Ben Donner	School of Health and Social Care

5. **Proposed start date** 3 March 2019

6. **Probable duration:** September 2019



University of Essex

7. Will this project be externally funded? Yes

If Yes,

8. What is the source of the funding?

NHS England

9. If external approval for this research has been given, then only this cover sheet needs to be submitted
External ethics approval obtained (attach evidence of approval) No

Declaration of Principal Investigator:

The information contained in this application, including any accompanying information, is, to the best of my knowledge, complete and correct. I/we have read the University's *Guidelines for Ethical Approval of Research Involving Human Participants* and accept responsibility for the conduct of the procedures set out in this application in accordance with the guidelines, the University's *Statement on Safeguarding Good Scientific Practice* and any other conditions laid down by the University's Ethics Committee. I/we have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my/our obligations and the rights of the participants.

Signature(s): *Oliver R Crofton*

Name(s) in block capitals: OLIVER CROFTON

Date: 10th FEBRUARY 2019

Supervisor's recommendation (Student Projects only):

I have read and approved the quality of both the research proposal and this application.

Supervisor's signature:

F. Bl

Outcome:

The departmental Director of Research (DoR) / Ethics Officer (EO) has reviewed this project and considers the methodological/technical aspects of the proposal to be appropriate to the tasks proposed. The DoR / EO considers that the investigator(s) has/have the necessary qualifications, experience and facilities to conduct the research set out in this application, and to deal with any emergencies and contingencies that may arise.

This application falls under Annex B and is approved on behalf of the ESC

This application is referred to the ESC because it does not fall under Annex B

This application is referred to the ESC because it requires independent scrutiny

Signature(s): *[Signature]*

Name(s) in block capitals: *Amogh Bhatia*

Department: *SMS*

Date: *8/3/19*

The application has been approved by the ESC

The application has not been approved by the ESC

The application is referred to the University Ethics Committee

APPENDIX J: Participant consent from

CONSENT FORM

Title of the Project: **A QUALITATIVE EXPLORATION OF THE UNDERSTANDINGS OF THE TERM 'WILLPOWER' HELD BY PEOPLE WHO ARE STRUGGLING TO LOSE WEIGHT**

Researchers: Oliver Crofton, Dr Frances Blumenfeld, Dr Ben Donner

Please initial box

1. I confirm that I have read and understand the Information Sheet dated 10th of February 2019 for the above study. I have had the opportunity to consider the information, ask questions and have had these questions answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw from the project at any time without giving any reason and without penalty.
3. I understand that, due to the nature of the questions asked during the research interview, that there is a risk that I may experience some feelings of sadness, inadequacy, worry, anxiety, foolishness or embarrassment.
4. I understand that the identifiable data provided will be securely stored and accessible only to the members of the research team directly involved in the project, and that confidentiality will be maintained.
5. I understand that data collected in this project might be shared as appropriate for publication of findings, in which case data will remain completely anonymous.
6. I understand that if I have any concerns or wish to complain about the interviewers conduct I can email Oliver Crofton (oc17181@essex.ac.uk) who will then put me in contact with Dr Ben Donner and/or Dr Frances Blumenfeld

Participant Name

Date

Participant Signature

Researcher Name

Date

Researcher Signature

APPENDIX K: Checklist of criteria for good thematic analysis taken from Braun & Clark (2006) and used to guide my thematic analysis

Table 2 A 15-point checklist of criteria for good thematic analysis

Process	No.	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for 'accuracy'.
Coding	2	Each data item has been given equal attention in the coding process.
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive.
	4	All relevant extracts for all each theme have been collated.
	5	Themes have been checked against each other and back to the original data set.
Analysis	6	Themes are internally coherent, consistent, and distinctive.
	7	Data have been analysed – interpreted, made sense of – rather than just paraphrased or described.
	8	Analysis and data match each other – the extracts illustrate the analytic claims.
Overall	9	Analysis tells a convincing and well-organized story about the data and topic.
	10	A good balance between analytic narrative and illustrative extracts is provided.
	11	Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.
Written report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do, and what you show you have done – ie, described method and reported analysis are consistent.
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis.
	15	The researcher is positioned as <i>active</i> in the research process; themes do not just 'emerge'.

APPENDIX L: Table showing which participants spoke about each sub-theme, where they did not and where their responses were counter to that theme

	1.1	1.2	1.3	1.4	1.5	1.6
Florence	No	Yes	No	Yes	Yes	No
Charlotte	Yes	Yes	No	No	No	Yes
Juliette	No	Yes	Yes	Yes	No	No
Bernadette	No	No	Yes	Yes	No	Yes
Kimberley	Yes	Yes	Yes	No	No	Yes
Francesca	Yes	Yes	No	No	Yes	Yes
Harmony	No	Yes	Yes	Yes	Yes	Yes
Aaron	No	Yes	Yes	No	Yes	No
Veronica	Yes	Yes	Yes	Yes	No	No
Angelica	Yes	Yes	Yes	No	Yes	Yes
Elizabeth	No	Yes	No	No	No	No
Roberta	Yes	Yes	No	No	No	Yes
Samantha	Yes	Yes	No	Yes	Yes	No
Katherine	Yes	Yes	No	No	Yes	Yes
Jennifer	No	Yes	Yes	Yes	Yes	Yes
Roseanne	Yes	No	No	No	Yes	Yes

	2.1	2.2	2.3	2.4		
Florence	Yes	Yes	Yes	Yes		
Charlotte	Yes	Yes	Yes	No		
Juliette	Yes	Yes	Yes	No		
Bernadette	Yes	Yes	No	No		
Kimberley	Yes	No	Yes	Counter-evidence given		
Francesca	Yes	Yes	Yes	Yes		
Harmony	Yes	Yes	Yes	No		
Aaron	Yes	Yes	Yes	Yes		
Veronica	Yes	Yes	Yes	Yes		
Angelica	Yes	Yes	Yes	No		
Elizabeth	Yes	No	Yes	Yes		
Roberta	Yes	Yes	Yes	Yes		
Samantha	Yes	Yes	Yes	Yes		
Katherine	Yes	Yes	Yes	Yes		
Jennifer	Yes	Yes	Yes	No		
Roseanne	Yes	No	Yes	Yes		

	3.1	3.2	3.3	3.4	3.5	3.6
Florence	Yes	No	Yes	Yes	Yes	Yes
Charlotte	Yes	No	No	Yes	Yes	Yes
Juliette	Yes	No	Yes	Yes and counter-evidence given	Yes	Yes
Bernadette	No	Yes	No	No	No	Yes
Kimberley	Yes	No	No	Yes	Yes	Yes
Francesca	Yes	Yes	Yes	Yes	Yes	No
Harmony	Yes	Yes	No	Yes	Yes	Yes
Aaron	Yes	Yes	Yes	Yes	Yes	Yes
Veronica	Yes	Yes	No	Yes	Yes	Yes
Angelica	Yes	Yes	No	Yes	Yes	Yes
Elizabeth	No	Yes	No	Yes	Yes	Yes
Roberta	Yes	Yes	Yes	Yes	Yes	Yes
Samantha	Yes	No	Yes	No	Yes	Yes
Katherine	Yes	No	Yes	Yes	Yes	Yes
Jennifer	No	Yes	No	Yes	Yes	Yes
Roseanne	Yes	Yes	No	Yes	Yes	Yes

	4.1	4.2	4.3	4.4		
Florence	Yes	Yes	Yes	Yes		
Charlotte	Yes	Yes	Yes	Yes		
Juliette	Yes	Yes	Yes	Yes		
Bernadette	Yes	Yes	Yes	Yes		
Kimberley	Yes	Yes	Yes	Counter-evidence given		
Francesca	Yes	Data missing	Yes	Data missing		
Harmony	Yes	Yes	Yes	Yes		
Aaron	Yes	Yes	Yes	Yes		
Veronica	Yes	Yes	Yes	Yes		
Angelica	Yes	Yes	Yes	Yes		
Elizabeth	Yes	Yes	Yes	Yes		
Roberta	Yes	Yes	Yes	Yes		
Samantha	Yes	Yes	Yes	Yes		
Katherine	Yes	Yes	Yes	Yes		
Jennifer	Yes	Yes	Yes	Yes		
Roseanne	Yes	Yes	No	Yes		

	5.1	5.2	5.3	5.4		
Florence	Yes	Yes	Yes	Yes		
Charlotte	Yes	No	Yes	Yes		
Juliette	Yes	No	Yes	Yes		
Bernadette	Yes	No	No	Yes		
Kimberley	Yes	Yes	Yes	Yes		
Francesca	Yes	Data missing	Data Missing	Yes		
Harmony	Yes	Yes	Yes	Yes		
Aaron	Yes	Yes	No	Yes		
Veronica	Yes	Yes	Yes	Yes		
Angelica	Yes	Yes	Yes	Yes		
Elizabeth	Yes	Yes	No	Yes		
Roberta	Yes	Yes	No	Yes		
Samantha	Yes	Yes	No	Yes		
Katherine	Yes	Yes	No	Yes		
Jennifer	Yes	Yes	No	Yes		
Roseanne	Yes	Yes	No	Yes		

APPENDIX M: Feedback from three participants on the proposed thematic structure

1. FEEDBACK FROM HARMONY

From: Harmony
Sent: 11 November 2020 12:14
To: Crofton, Oliver R <oc17181@essex.ac.uk>
Subject: Re: Willpower research

Hi Oliver,

I have read through your thematic structure & your research sounds incredibly interesting - as I hoped when I took part in the research.

I would say the themes ring true for many people, myself included and many would agree with these findings when considering high and low willpower. Participants at Slimming World may have a different opinion as they may find willpower is discussed in a subliminal manner (e.g. the staff pushing for people to get losses, weighing in each week and setting a weight loss target for the following week etc. all encourage willpower to increase / discussing what "went wrong" in the week to prevent a loss discourages low willpower - but this could also be confused with group shame).

From my distant memory, I believe you have perfectly captured my thoughts and feelings within your thematic structure.

I would really enjoy reading your full results section - the research is really interesting.

If you require anything else / further comments etc. you're welcome to reach out.

Thanks!

Harmony

On 7 Nov 2020, at 14:06, Crofton, Oliver R <oc17181@essex.ac.uk> wrote:

Hi Harmony

I hope you are okay.

Thanks a million for agreeing to help with this. Just so we are clear, I am unable to give you another Amazon voucher to thank you for your further involvement. I think I told you before, but do please feel free to withdraw at any point if you so wish whether I told you or not.

As discussed, I have attached the main themes that I perceive as being in the data set along with a set of questions that might help you make comments.

If you have any comments or thoughts on the data set please let me know but if nothing comes to mind please do not spend too long on doing this.

If you wish to read the results section in its entirety please let me know. It is quite long so I have not sent it.

Please also feel free to call me if you want to give feedback verbally by phone.

Thanks again.

Olly Crofton
Trainee Clinical Psychologist
University of Essex
07984 453 057

<Thematic structure.docx>
<Prompt questions for participants.docx>

2. Feedback from Veronica

From: Crofton, Oliver R <oc17181@essex.ac.uk>
Sent: 12 November 2020 21:34
To: Veronica
Subject: Re: Willpower research

Okay - no problem!

Thanks again and very best wishes.

Olly Crofton
Trainee Clinical Psychologist
University of Essex
07984 453 057

From: Veronica

Sent:12 November 2020 18:26
To:Crofton, Oliver R <oc17181@essex.ac.uk>
Subject:Re: Willpower research

Hi Olly,

No, I don't think your explanation changes my mind.

Regards,

Veronica

Sent from my iPhone

On 11 Nov 2020, at 19:01, Crofton, Oliver R <oc17181@essex.ac.uk> wrote:

Hi Veronica - Thanks a million for doing this. I am enormously grateful.

Sorry my slow response. It's been a gruelling couple of days.

Your feedback is very much appreciated and is indeed helpful.

Can I please just check with you ... When gave the theme about willpower having downsides I was talking about how participants felt that too much willpower might make someone rigid, uncompromising, difficult to get on with, 'the boring one who never lets their hair down', or someone vulnerable to eating disorders. Is this something that you might agree with now I have given a fuller explanation? If not, that's fine and will be interesting to discuss in my write up. Either way it is just something it would be good to be very clear about please.

If you could please let me know that would be very kind indeed.

Hope to hear back again.

With gratitude

Olly

Olly Crofton
Trainee Clinical Psychologist
University of Essex
07984 453 057

From: Veronica

Sent:10 November 2020 14:54
To:Crofton, Oliver R <oc17181@essex.ac.uk>
Subject:Re: Willpower research

Hi Olly,

Sorry it's taken me so long to reply.

Your findings are really interesting.

Themes that rang truer to me are that willpower is more of a habit and mindset, rather than a desire.

I certainly agree that willpower is influenced by hormones and psychological well-being, as would quite a few ladies in my SlimmingWorld groups.

The only thing I would disagree with is that willpower has a downside. I'm not sure what you meant by this.

One point that jumped out at me is the fact that GPs/healthcare professionals identify low (or lack of) willpower as an issue, but fail to address it in any meaningful way.

Hope this is helpful.

Sincerely,

Veronica

Sent from my iPhone

On 7 Nov 2020, at 14:08, Crofton, Oliver R <oc17181@essex.ac.uk> wrote:

Hi Veronica

I hope you are okay.

Thanks a million for agreeing to help with this. Just so we are clear, I am unable to give you another Amazon voucher to thank you for your further involvement. I think I told you before, but do please feel free to withdraw at any point if you so wish whether I told you or not.

As discussed, I have attached the main themes that I perceive as being in the data set along with a set of questions that might help you make comments.

If you have any comments or thoughts on the themes please let me know but if nothing comes to mind please do not spend too long on doing this.

If you wish to read the results section in its entirety please let me know. It is quite long so I have not sent it.

Please also feel free to call me if you want to give feedback verbally by phone.

Thanks again.

Olly Crofton
Trainee Clinical Psychologist
University of Essex
07984 453 057

<Thematic structure.docx>
<Prompt questions for participants.docx>

3. Feedback from Roberta

From: Roberta
Sent: 13 December 2020 18:08
To: Crofton, Oliver R <oc17181@essex.ac.uk>
Subject: Re: Willpower research

Hi Olly,

That's okay. I think what I mean is that it doesn't feel right to agree with all of those influences. Surely there should just be one or two, but not all? I feel to agree with so many, means that maybe I don't even know what "willpower" is and that by agreeing with them all is my brain making excuses.

Does that make any more sense?

Regards,
Roberta

On Sat, 12 Dec 2020 at 09:33, Crofton, Oliver R <oc17181@essex.ac.uk> wrote:

Hi Roberta

Thanks a lot for doing this. You are very kind indeed.

Sorry for my slow reply but it has been a busy week for me.

Please forgive me for being a pain, but can you please just clarify (in order to make your feedback be as helpful as possible) what you mean when you say " I feel that it should be impossible to agree with so many influences, and this makes me think that willpower is definitely something that is all in my mind, otherwise there should be a definitive influence or reason?"

Thanks again.

Olly Crofton
 Trainee Clinical Psychologist
 University of Essex
 07984 453 057

From: Roberta
Sent: 09 December 2020 21:17
To: Crofton, Oliver R <oc17181@essex.ac.uk>
Subject: Re: Willpower research

Hi Ollie,

Please accept my apologies for responding so late. I've been on the road quite a bit for my work and have lost track of everything!

Thank you for sending through the main themes, I have found it quite interesting reading. Especially as I found myself agreeing with all of your points of influences, of which there are many. I feel that it should be impossible to agree with so many influences, and this makes me think that willpower is definitely something that is all in my mind, otherwise there should be a definitive influence or reason?

Theme 5 I found particularly interesting as I recognise all of those thoughts, but obviously they're not just mine.

After our conversation and subsequently reading these points, I feel that my thoughts on willpower have definitely changed. I think that the use of the term willpower is an excuse (certainly for me) to do something that I know is either bad for me or seen as frowned upon. I class myself as quite a strong minded person and I know if I wanted to I could stop, I've done it before and I know I could do it again. I think I just don't want to, either through selfishness or laziness.

I don't know if that's of any help to you or if I'm just rambling!

Hope you are well.

Kind regards,
Roberta

On Sat, 7 Nov 2020 at 14:09, Crofton, Oliver R <oc17181@essex.ac.uk> wrote:
Hi Roberta

I hope you are okay.

Thanks a million for agreeing to help with this. Just so we are clear, I am unable to give you another Amazon voucher to thank you for your further involvement. I think I told you before, but do please feel free to withdraw at any point if you so wish whether I told you or not.

As discussed, I have attached the main themes that I perceive as being in the data set along with a set of questions that might help you make comments.

If you have any comments or thoughts on the themes please let me know but if nothing comes to mind please do not spend too long on doing this.

If you wish to read the results section in its entirety please let me know. It is quite long so I have not sent it.

Please also feel free to call me if you want to give feedback verbally by phone.

Thanks again.

Olly Crofton
Trainee Clinical Psychologist
University of Essex
07984 453 057

APPENDIX N: Feedback from Dr Sarah Appleton (clinical psychologist working in weight management services) on the proposed thematic structure

HERE ARE SOME QUESTIONS THAT MIGHT HELP YOU COMMENT ON THE RESULTS

Are there any themes that are true for my participants that may not ring true for users of obesity services? Or do you think there are any themes that I have missed that may be true for users of obesity services?

Apologies for my memory, but who are these results from again? I feel like “willpower” in general can be a helpful construct for achieving short-term weight loss goals, and is something that is focused on heavily during Tier 2 weight management services. However, possibly linked with a more limited view of willpower (i.e. willpower as something that is draining or exhausting), I feel that “willpower” can often be an unhelpful construct for many clients that I see during Tier 3 services – offering short-term benefit but not being sustainable in the longer-term. Theme wise, I would therefore add themes surrounding willpower as exhausting or time limited (it’s difficult to sustain, then contributes to feelings of frustration, guilt or shame if individuals perceive themselves to have lost willpower), or willpower as focused on the individual (often neglecting the impact of other biopsychosocial influences on eating behaviours and weight management).

However, overall, I think that the themes connect with those accessing support from Tier 3 weight management services. I have a few comments:

- Theme 5.1: I would definitely agree with this and think this likely reflects, in part, societal stigma surrounding obesity (whereby the onus is on the individual to lose weight, and for “failing” if they cannot, rather than acknowledging the other biopsychosocial components of obesity). I see this stigma internalised on a regular basis (theme 5:2), presenting a significant barrier to clients achieving positive or sustained change to their lifestyle behaviours (i.e. because of low self-efficacy “I don’t believe I can”, or low self-esteem “my own needs aren’t worth prioritising”).
- Theme 4:3 : I would be interested to know what the downsides are. In clinic, I think the main downsides I see are willpower feeling effortful or time-limited, or willpower being something that is “on or off” (and can thus contribute to feelings of guilt or shame, and subsequent emotionally driven eating behaviours, if it is “off”). Clinically, this highlights the importance of us working together to connect with a client’s true values surrounding weight management (i.e. what are they actively moving towards, versus a focus on “dieting” and what they can or cannot have), which can offer a much more sustainable and meaningful focus for improving health and lifestyle behaviours. It also highlights the need for therapeutic approaches to involve compassion based techniques that can support clients to develop more compassionate self-talk and behaviours.
- 3:4 : Yes, I would also add medications (although probably covered by hormones and physical health)
- 1:5: I often hear clients express their frustration that longer-term powerful motivators for weight loss (i.e. to improve physical health, to be happy and healthy for their family) are often overridden by short-term impulses or cravings for food. This can again contribute to feelings of guilt that clients do not “want” to change enough (which is almost certainly not true). Again, I would do gentle psychoeducation surrounding human learning and short-term

conditioning (i.e. we often get drawn to food immediately, and without realising, as it helps to meet many of our needs in the short-term) and work with clients to help them a) increase awareness of their behaviours in the here-and-now and b) connect with their true values (i.e. what are their long-term motivations) to help increase “willpower” in the moment.

If you think about people that you know with high willpower (or yourself when you feel you have shown high willpower), do you think they/you would agree with these findings?

Partly! When I think of willpower I also think of control and restraint – which I again see as time limited and effortful. I therefore view willpower as something that is constantly fighting against our natural urges, and may therefore not be sustainable. What I am to do in clinic is increase **understanding** (i.e. I am the way I am because of X, Y, Z; Food serves a function; I am not to blame, how can I best care for myself moving forward?) and **self-efficacy** (i.e. increasing self-belief, making small and sustainable changes, focusing on the “bigger picture”) – maybe this is willpower? I know that personally when I have understanding and a sense of self-efficacy my willpower is definitely increased!

When I have seen clients be truly successful in their weight loss (exhibiting high willpower) they cite benefit from the following:

- Slowing down and noticing food cravings: is this true physical hunger or head hunger?
- Learning to listen to cravings: what do I actually need? (i.e. if I’m feeling lonely or isolated, what I actually need is meaningful connection with other people). We want to listen to cravings, not simply override them.
- Connecting with long-term values surrounding weight loss and finding ways to bring the long-term motivations into the here-and-now (i.e. by visualisation, or by connecting with the qualities they want to display as a person)
- Making things easy: Meal planning, preparing foods, having a routine – as identified in 3.2 this can help bolster willpower and keep going when times are hard.
- Being aware of an “all or nothing” mind-set: “I’ll do what I can”, having flexibility of thought and self-compassion. This is particularly important in gently returning to “helpful” behaviours if/when they experience some understandable lapse.

With all of these behaviours, they are progressive. The more clients start to slow down, notice, spot triggers for eating behaviours etc the more self-efficacy builds, and the more able they feel to implement and sustain positive change.

I’m also wondering if an individual’s perception of willpower is also influenced by their dieting history? If an individual has repeatedly gained and lost weight, might this change their view of willpower as either helpful (i.e. “I had it then, I need to get it back now”) or unhelpful (i.e. “the changes I made weren’t sustainable, it was exhausting”, “if that’s what I have to do to lose weight then I don’t want to go back to that”)

If you think about people that you know with low willpower (or yourself when you struggle to find willpower), do you think they/you would agree with these findings?

Yes. I think it’s probably covered in Theme 2/3 but I would also just emphasise the relationship between willpower and someone’s personal history/beliefs. Willpower is likely to be influenced by whether or not we feel able to make changes, prioritise our own needs, or deserving of self-care. Typical COM-B model, but whether or not we have opportunity and means to make changes as well.

What do you think your service users might say about these themes?

I think service users would connect with these themes. Comments would probably be similar to what I've written above.

Are there any themes that you think would resonate with them particularly well?

All of them! In summary - willpower is viewed as something that is desirable to have, and can be bolstered by strategies, but can also have negative connotations including self-blame and shame; something that is unattainable or easily lost; or something that is effortful and time limited ("I'm fed up with dieting").

Do any of these themes spark off any new ideas that you would like to tell me about (you could do this by phone) or any comments that you would like to make?

A really interesting study and the results definitely connect with what I see in clinic! I think the themes are really well thought out.

Reflecting on "willpower" in general, it makes me think about how societal stigma surrounding obesity can contribute to a person-centred, individual-blame culture understanding of weight management (i.e. it just comes down to an individual's willpower, which I strongly argue is the case). I've noticed that there's not much acknowledgement of other factors which may influence weight or weight management (i.e. medication, genetics, socio-economic circumstances, societal nudges towards obesity such as increased portion sizes and increased sedentary occupations etc.) – in my work I try to foster an attitude of "this is not my fault, but it is my responsibility" to try and increase compassion, and thus hopefully longer-term sustained change with health and lifestyle behaviours. I wonder if the lack of acknowledgement of these factors is reflective of the fact that individuals tend to blame themselves for difficulties with weight (mirroring societal stigma), before acknowledging the impact of other biopsychosocial factors?

What does willpower mean to clients (not necessarily the definition, as stated in theme one, but how do clients feel about themselves when they perceive that they either do or do not have "willpower")? In clinic, I see a huge amount of frustration, shame, guilt surrounding "low willpower" that can serve as a significant barrier to clients actually being able to prioritise their own self-care of needs (a key component to making positive change to health and lifestyle behaviours).

I'm also curious as to how the research questions were framed to clients, or how they reacted to the idea of willpower. I know that we spend a lot of time moving away from talk about "willpower" (as it can seem overly focused on the individual, unsustainable and often something clients feel is illusive to them) and more towards a conversation on values. By discussing a client's values (i.e. who and what truly matters to them; Acceptance and Commitment Therapy) in addition to tools such as mindfulness, clients are encouraged to notice moment-by-moment their urges and cravings, and to make "towards" moves (i.e. make a choice to move towards who and what matters to them). This may be what you are referring to as willpower?