How do people with Type 2 Diabetes experience their relationship with food following a course in mindfulness?

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Preface

This portfolio is made up of three sections. Section A is the research component which is an attempt to understand the kind of relationship people with type 2 diabetes have with food. Section B is a case study with a process report of a client I was seeing who had been suffering from PTSD. Section C is a publishable paper which follows the author guidelines of the British Journal of Health Psychology where the research may have something to offer clinicians who are working with people with diabetes and maybe other long-term conditions.

On the face of it there may not seem to be a common thread or theme that holds these sections together as a whole piece of work. However, I will start from the beginning of my journey here to make the connections. I started out on the Doctorate programme as a mature student and maybe as someone a little stuck in her ways. As I progressed through the course over the 3 years I found myself being challenged and drawn into seeing what I thought I already knew from a different perspective. I had until this point not really considered my personal beliefs about knowledge but on reflection I saw myself as someone who needed certainty and direction when working therapeutically. I had trained in CBT as a direct consequence of this way of thinking and I positioned myself more or less the 'expert' in the room when with a client. I had lost sight of what brings someone to therapy, how they see themselves and experience others and how they are in the world. Indeed I had not considered my very presence with them in the room beyond being the one they have come to see for help. This was until I was introduced to qualitative methodology in research. This totally changed my view on knowledge and truth and my need for certainty. I began to see that I was not separate from the clients who came to see me, I was beginning to really know, not just theoretically, that my presence had an effect on others and their understanding of their experiences in the world. This seed of knowledge took hold and grew and influenced, not just in how I decided to conduct my research but in my relationships with clients in the therapy room.

The research section reflects this process in action. I had been running a mindfulness group for people with diabetes with the direct intention of alleviating their depression and anxiety as much of the literature pointed to this co-morbidity as having an effect on the patients' ability to self-manage their condition. However, the course had no effect on their depression and anxiety scores. In some cases it got worse. What I noticed though was a felt sense of change in the way they communicated and their openness and increased sensitivity to their bodies. I found myself wondering what was going on. The more I thought about it and struggled through the quagmire of how to make this a research project, I could see that I did not really know or understand what the people on the course were actually experiencing in relation to their diabetes and self-care as a result of the course. Something had happened but what was it? The thought about Discourse Analysis to focus on how they spoke about their diabetes was a consideration but then I wanted to make sense of this experience so I turned to Interpretive Phenomenological Analysis. I also could not approach their experiences in such a broad way as looking at diabetes so I took one piece of the experience of self-managing that seemed the most prominent one, their relationship to food.

This took me on a very long and arduous journey as I attempted to shift my attitude to not just the research but my clinical work too. It was during this shifting of attitude that I began working with a young woman who had come to me having suffered a traumatic time giving birth in which she thought she, and/or her baby, was going to die, She had completely shut down her life for 8 months at the time she came to me and could not see a way back to the life she once had. She was diagnosed with PTSD and there is a well-documented CBT protocol for treating this issue. However, the decision to work in this way was something that I had discussed with her and it was clear that it was the experience of talking about it and more importantly the *re-experiencing* that she wanted because she had only one view of it which was that she had a beautiful baby out of it so what was her problem? This really struck me as important to my changing perspective of how we gain knowledge and how we can get stuck with what feels like factual information that should change everything. In this case it did not and so going back

to have the experience all over again (a few times) enabled her to notice many more things and to begin to assimilate these events into what she already knew about herself and not completely alter who she thought she was and is. This case brought home to me how important it is to make sense of ones experiences, to reflect on events and bring to mind aspects that had not been reflected upon but held some raw experiences that once she was able to bring to mind dramatically changed her understanding of the traumatic event.

The publishable paper is focused on the theme of *Vulnerable and Undisciplined Child.* This particular theme was particularly poignant in the experiences expressed by the participants in the research study. It brings to mind the rawness of experiences that had been taken for granted as being something that only exists in the past and yet here it was being re-experienced over and over. It is an aspect of the relationship with food that I was most surprised by and challenged me to think about how profound the lived experience can be in so many ways and which I may not have considered so important in my clinical work before.

The research led me to consider the possibility more deeply than I had previously just how much our experiences shape what we take for granted, even food. The interviews I conducted were emotional in a way I had not truly expected. The experiences that the participants got in touch with were reflective of experiences that for some they had not previously considered or given any thought to. They had taken things for granted and struggled to keep body and soul together not fully appreciating that another way of experiencing life was available. Together these three pieces of work have given me the opportunity to reflect on what I too had taken for granted and challenged me to be in touch with what was there and not what I thought was there. This portfolio is therefore a representation of my journey where I realised that it's not *what* you know, it's *how* you know it.

Section A: Doctoral Research

How do people with Type 2 diabetes experience their relationship with food following a course in mindfulness?

Joelle Brogan

Supervised by Dr Fran Smith

Abstract

Food and the relationship that people with diabetes have with it has not specifically been investigated. The research to date, mainly quantitative, has focused on the role of emotions and cognitions on the eating behaviours of people who have been diagnosed with an eating disorder or who are clinically obese. With an increasing number of people in the UK being diagnosed with Type 2 diabetes and the physical and emotional problems that this can come with has prompted mental health services to be involved in helping this group of people to improve their physical and mental well-being as a means to improving their ability to self-manage. With little information on how the people with Type 2 diabetes experience their relationship to food it is difficult to understand fully the influences on this relationship. This research attempted to understand the relationship that people with Type 2 diabetes have with food using Interpretative Phenomenological Analysis. This study was conducted specifically after an intervention had been provided to help them self-manage, that is, a course in mindfulness. Semi-structured interviews were conducted with 8 participants aged between 46 and 73 years. All had attended a course in mindfulness which was run at the diabetes clinic that they had attended for treatment. The range of years since the attendance on the mindfulness course was 1 – 8 years and the range of years since a diagnosis of diabetes was 5 – 23 years. 2 of the participants were male. 3 were white British, 3 were Caribbean and 2 were British Asian. All of them spoke fluent English and all of them were on some form of medication to help control their diabetes. Three main themes emerged from the data: Agony and Ecstasy, Vulnerable and Undisciplined Child, and What has mindfulness ever done for me? The analysis explores the data describing these themes through the participants' own words. An attempt to locate the findings in the broader research literature and theories to help understand how these experiences could be explained is discussed leading to a consideration of the literature around cravings, attachment theory and mindfulness interventions. These findings provide an insight for Counselling Psychologists who are working with people with diabetes who are struggling to manage their relationship with food.

CHAPTER 1: Introduction

"*The cost of treating diabetes will continue to spiral out of control and threaten to bankrupt the NHS. Now is the time for action." (Diabetes UK, August 2015)*

1.1 Introduction

Diabetes is now one of the world's most common long-term health conditions with over 3.5 million people in the UK diagnosed with the condition and a further one million as yet undiagnosed in the UK (Diabetes UK, 2017). The main types of diabetes are type 1 (T1D) and type 2 (T2D). The difference between them is important with regards to the role of food and diet: T1D is an auto-immune disease which means the immune system is attacking the insulin-producing cells in the pancreas thus making those with T1D insulin dependent. Therefore, it is not associated with excess body weight. T2D is characterised by the body losing its ability to respond to insulin, thus making them insulin resistant. This condition is associated with being overweight and having an increased waist circumference. Unlike T1D which is often diagnosed in childhood, T2D is usually diagnosed in those over 30 years of age and makes up 90% of diabetes cases (Diabetes UK, 2017). According to Stratton et al. (2000), T2D is six times more likely in people of South Asian descent and three times more likely in African and African-Caribbean people.

Being overweight or obese accounts for 80-85% of the risk of developing T2D. Being overweight or obese is caused mainly by overeating energy-dense foods with little nutritional value and physical inactivity (WHO, 2018). WHO estimates that 39% of adults globally are overweight and 13% are obese. There is also a link between obesity and eating disorders due to a decrease in the ability to be aware of internal bodily cues (Kaplan & Kaplan, 1957). The prevalence of eating disorders especially Binge Eating Disorder (BED) and obesity-related eating behaviours amongst those with diabetes has been reported to be in the region of 25% (Celik et al., 2015; Nicolau et al., 2015) and is related to increasing difficulties of losing weight

and thus further complications (Ercan & Kiziltan, 2013; Gagnon, Aimé, Bélanger & Markowitz, 2012; García-Mayor & García-Soidán, 2017). Obesity is also associated with cognitive decline (Koekkoek, 2015) and linked to depression and anxiety which are two to three times more prevalent in people with diabetes (PWD). It is also linked to a poor relationship with food and executive function (Black et al., 2018; NICE, 2009). Other factors for being overweight are the socioeconomic inequalities of living and working conditions, such as education, housing, unemployment, political economy, and the effect of this on the food production, environment and insecurity (Bann, Johnson, Li, Kuh & Hardy, 2018; Zukiewicz-Sobczak et al., 2014). However, T2D is seen as being due to mainly modifiable risk factors at an individual level, such as being overweight or obese, and eating unhealthily. These risk factors alone have produced estimates of almost 12 million people in UK as being at risk of developing T2D.

Unlike many other long-term conditions, diabetes is a condition that has to be self-managed. The self-management tasks that need to be performed on a regular basis include monitoring blood glucose levels, taking medications properly, engaging in physical activity, eating healthy foods, foot examinations, and other activities that aim at reducing diabetes complications. An inability to maintain good self-care puts PWD at risk of developing further complications such as damage to eyes leading to blindness (diabetic retinopathy), damage to kidneys (nephropathy) leading to renal failure, and damage to nerves (neuropathy), plus cardiovascular diseases (macrovascular complications), and sexual dysfunction (de Groot, Anderson, Freedland, Clouse & Lustman, 2001; Fowler, 2008).

This chapter will first consider the relevant existing literature that helps to bring some understanding to the lived experience of people with diabetes and, given the importance of food in self-management of the condition, I will focus on their relationship to food. This will be achieved by looking at the extent and nature of the difficulties of living with diabetes and then the difficulties specifically with the relationship with food. There is a focus on the relevant qualitative literature and research studies in keeping with counselling psychology's promotion of diversity in research methodologies. Then, attention will be focused on what interventions there have been to improve self-care in PWD and their impact. This will necessitate

quantitative research but will be broadened out where possible with qualitative research. Mindfulness as a promising intervention will then be introduced with definitions and characterisations of the key facets of mindfulness. This will lead into an exploration of the theories underpinning mindfulness, an overview of its benefits and potential adverse effects, with a specific focus on the relevant form of mindfulness-based interventions (MBI) for this study. This is mainly mindfulness-based stress reduction (MBSR) programmes and mindfulness-based cognitive therapy (MBCT) which is the particular form of training that the participants of this study undertook. I will outline the key processes and their relationship to eating behaviours that may explain the effects of mindfulness. Finally, I will summarise the rationale for the central research question of this current study, which seeks to offer insight on the impact of MBCT to ascertain what the relationship with food is since the intervention and whether any difficulties remain. The aim of the research is to produce suggestions for the future design of interventions designed to help people with diabetes overcome this particular barrier to self-management.

1.2 The nature of the lived experiences of diabetes

There is concern about the increasing number of people developing or being at risk of developing diabetes. Of those with T2D, there is concern that despite advancements in managing diabetes through medication and ease of self-monitoring blood glucose levels (HbA1c), many people struggle to carry out the necessary tasks for effective self-management (Skovland & Peyrot, 2005). On first receiving a diagnosis of diabetes, 50% already have further complications (Diabetes UK, 2012). Inevitably, there will be an exceptional strain on the NHS and unnecessary suffering for these patients, making diabetes a key health concern (NHS England, 2015).

There has been an emphasis on *what* PWD should eat and do and less on the *how* and *why* of eating. This study addresses these issues by examining the attitude towards everyday

problems with food since completing a course in mindfulness. This will be achieved by paying attention to the participants' subjective experiences, whilst also considering the impact of the mindfulness training that they received on their relationship with food. I will examine the literature on the lived experience of diabetes to highlight some of the experiences that may be problematic.

1.2.1 The lived experiences of diabetes and food

A number of qualitative studies have been able to provide some insight into the experience of living with diabetes. The themes of self-blame and shame were consistent throughout these studies (Beverly et al., 2012; Kato et al., 2016; Kneck, Fagerberg, Eriksson & Lundman, 2014; Rayman & Ellison, 2004). Using longitudinal qualitative descriptive design over a three-year period since diagnosis, it was found that there was a gradual decline in the ability to manage the complexities of diabetes self-care and finding it a constant battle (Kneck et al., 2014). Grounded theory helped to identify social stigma as having a role in this decline, as shame and internalised stigma took its toll as some struggled to adjust to the new regimens (Kato et al., 2016). Issues around the cause of diabetes and the responsibility for controlling the condition will differ according to personal interpretations (Parry, Peel, Douglas & Lawton, 2006) which will in turn determine their responses to the condition. Using discourse analysis, Parry et al. (2006) found that the strategies used in these circumstances included disconnecting from social networks, or denying having the condition. This is partly explained through grounded theory, as the inability to enter into the 'sick role' denied them the obligation to follow medical interventions and thus restore their health (Kato et al., 2016) even though many PWD saw themselves as ill (Koch, Kralik & Sonnack, 1999).

Food holds meaning in terms of self-identity, like sexuality, eating versus denial, guilty versus pleasure, and issues of self-control (Ogden, Liakopoulou, Antilliou & Gough, 2009). However, there is a paucity of qualitative literature on the specific lived experiences of food in PWD despite the fact that nearly all studies on diabetes mention eating behaviour as being of

the utmost importance in managing the condition. The available studies say that one of the main difficulties that PWD faced was in making adjustments to their eating behaviours. The difficulties that were experienced as they struggled to make these adjustments went through a number of stages. The first one was in adopting a diet that was in stark contrast to their previous diet and lifestyle (Castro-Sánchez & Ávila-Ortíz, 2013; Davis, Pope, Mason, Magwood & Jenkins, 2011; Lawton et al., 2008; Savoca & Miller, 2001). There were reported difficulties around social and cultural appropriateness of eating certain foods and PWD not wanting to offend people in their community or create alienation by not eating foods from their cultural heritage (Lawton et al., 2008). Although there was a tendency to start off by being strict with their new diets, not enjoying their food as much eventually led to non-compliance. Not being able to have the food they enjoyed and being unprepared for the changes in diet was a fundamental issue for some of these participants. This effect was heightened by the individual's personal history of eating patterns and social support issues along with repeated unsuccessful efforts to lose weight and emotional eating, which were all major themes.

Qualitative research has its limitations, not least due to purposive and specific sampling. Therefore, the results only reflect the experiences of the participants studied. However, care should also be taken in noting other aspects of the process. For example, in the phenomenological-hermeneutic study from Kneck et al. (2012), the interviewer was also the person who had diagnosed them prior to the semi-structured interview. This has the effect of placing the interviewer in a position of power and authority, and although this was argued to have been able to put the participant at ease, it could also mean that the researcher could not 'bracket off' pre-conceptions. This therefore introduces an expert-patient dynamic into the co-construction of data, potentially inhibiting a full exploration of the topic in hand. This was not discussed in the limitations. The heterogeneity of the methods outlined, such as trajectory phasing, discourse analysis, thematic analysis, grounded theory, inductive interpretive approaches, and stance analysis, is beyond the scope of this chapter to compare but each has its strengths and weaknesses. For example, the use of thematic analysis lacks an interpretative lens which would have enabled the data to be situated in the wider contexts of

society, culture and theory (Willig, 2012). Grounded theory starts with inductive strategies for collecting and analysing qualitative data to enable the development of middle-range theories (Charmaz, 2008) but loses the individual participants voice by looking for the concepts behind what was actually said though maintaining the context (e.g. Kato et al., 2016). This, and inductive interpretive approaches, would be a starting point for further investigations but none were reported. Therefore, there are no known interventions as a follow-up to these findings which would have allowed for an examination of the lived experience of shame, stigma or self-blame following treatment. However, what these studies do indicate, that may be missed in quantitative studies, is that in a variety of contexts a number of PWD in these studies experience shared difficulties such as shame, self-blame and a growing inability to know how to deal with their bodies.

1.2.1.1 Eating disorders

There are a number of studies reporting on the level of eating disorders within PWD. A recent literature review on the prevalence of eating disorders (García-Mayor & García-Soidán, 2017) found the range was 12.2% to 40% with binge eating disorder (BED) being the most prevalent with 5% to 25.6% prevalence rates. However, it should be noted that there was an estimate of subclinical forms of BED being 20%. The identified non-pathological eating behaviours in PWD are restrained, external (in response to sights and smells of food) and emotional (Tak et al., 2015). Other identified behaviours such as grazing are not well defined (Carter & Jansen, 2012) but are associated with poorer treatment outcomes (Heriseanu, Hay, Corbit & Touyz, 2017).

Park, Quinn, Park and Martyn-Nemeth (2018) looked at the role of coping strategies as a mediator of particular types of eating behaviour in T2D when feelings of stress occur. When diabetes-related stress was experienced as measured by the Diabetes Distress Scale (DDS; Polonsky et al., 2005) the study found that emotion-oriented coping strategies (strategies

aimed at regulating emotions) partially mediated the self-report of stress and external, emotional and restrained eating behaviours. However, one of the issues with this study is that the eating behaviour questionnaire used (Dutch Eating Behaviour Questionnaire; van Strien, Frijters, Bergers & Defares, 1986) measured restrained eating using items referring to weight control behaviours (e.g. 'Eat less than usual when gained weight' and 'Reject food or drinks because worry about weight') which was not the focus of the study. Also, one would expect a degree of restrained eating as part of the diabetes lived experience and so items like 'Eat less deliberately' would be deemed an essential part of managing diabetes (Gonzalez, Fisher & Polonsky, 2011). There is also an issue with the DDS, as only one item refers to food and eating behaviour, namely, "*Feeling that I am not sticking closely enough to a good meal plan".* The restrained eating behaviour is reported to come from an elevated score on the DDS as an emotion-oriented coping strategy and yet it could be argued that this is partly based on expected eating behaviours due to managing the condition. However, restrained eating behaviours combined with a tendency to use emotion-oriented coping strategies may lead to binge eating behaviours (Chao et al., 2017).

Taken together, these studies have led to a reconsideration of what should be targeted in PWD. A recent review of the literature (Seib et al., 2018) on lifestyle interventions for PWD (exercise, diet, diabetes education or a combination) suggested that there was no single approach that came out as having greater value in terms of changes in various measures such as diet, exercise and glycaemic control. This indicated that interventions should therefore target multiple behaviours and emphasise health literacy, self-efficacy and problem-solving skills. Combined with deficits for PWD in body awareness, such as hypoglycaemic (low blood sugar levels), unawareness (Martin-Timón & del Cañizo-Gómez, 2015) and reduced perception of the bodily signals prevalent in eating disorders (Eshkevari, Rieger, Longo, Haggard & Treasure, 2011; Pollato et al., 2008) this presents particular challenges for PWD in meeting their blood glucose goals.

1.3 Interventions for managing the relationship with food in diabetes

Cognitive Behaviour Therapy (CBT) was the most researched intervention for helping PWD manage their HbA1c levels (blood sugar levels) and was based on the assertion that the main barriers to coping with diabetes were cognitive and behavioural in nature. This led to the use of CBT as it is recommended for challenging dysfunctional thinking styles, beliefs and negative behaviours. It was assumed that by challenging and questioning these thoughts and behaviours it would be possible to replace them with cognitions that are more helpful and adaptive and therefore lead to improved self-care and subsequent lowering of HbA1c levels.

The evidence for the effectiveness of CBT in improving HbA1c has been shown in a number of studies (Uchendu & Blake, 2017) but the picture is mixed. A review of 12 randomised controlled trials (RCTs) on the use of CBT with PWD found that there was evidence of CBT affecting short to medium term (four-eight months) reductions in HbA1c levels but were not maintained long term (up to 12 months). There was also a significant improvement in depression but this too dropped off over time. Where it did improve depression scores, there was no improvement in diabetes-related distress over time (Uchendu & Blake, 2017). Similar findings were found in other studies (Lustman, Griffith, Freedland, Kissel & Clouse, 1998; Hermanns et al., 2015; Safren et al., 2014) and where there were positive results, it was difficult to isolate the mechanisms of change. Lustman et al. (1998) found CBT to be effective in treating major depression but not HbA1c levels until six months later. The results of this RCT were not conclusive and the extra 10 hours of contact with a psychologist who ran the CBT group was not controlled for. Safren et al. (2014) tailored their CBT course for T2D and both the intervention group and control group had adherence counselling and set individualised diabetes self-management goals with a dietician and nurse. The CBT group had the addition of nine to 12 sessions of CBT which included two sessions of relaxation. There was evidence of improvement in self-management and glycaemic control for the

intervention group and although there was an improvement in depression, there was no between-group differences. Again, it is difficult to ascertain whether it was CBT or the relaxation or the extra nine to twelve face-to-face contact sessions over four months that could account for the improvements. Integrating diabetes into individuals' lives by reducing diabetes-related distress, establishing better coping skills and identifying and managing stress in general was the target of a customised CBT programme for PWD called Diabetes Motivation Strengthening (Hermanns et al., 2015). The results showed a significant reduction in symptoms of depression but no positive effect on self-reported self-care behaviours. There was a significant improvement in glycaemic control in both the intervention and control group, but both groups had received diabetes education so the mediating pathways to improved glycaemic control is unclear.

These mixed results are due partly to the heterogeneity of studies and use of different measurement tools and a lack of suitable controls. It also highlights other limitations: Firstly, there is the acknowledged difficulties in CBT of affecting behaviour change, especially health behaviours (Michie, 2005), as there is a tendency to return to habitual responses due to difficulties incorporating new behaviours in daily life. This could be due to CBT being too short an intervention, not being tailored to the specific needs of PWD, or due to barriers such as low self-esteem and feeling defeated. Secondly, there is a high drop-out rate in CBT with PWD (Cuijpers, van Straten, Andersson & van Oppen, 2008), again possibly related to low self-esteem and lack of motivation. These studies add to the evidence of only a weak association between depression and self-care activities in PWD (Gonzalez et al., 2008; Markowitz, Gonzalez, Wilkinson & Safren, 2011; Winkley, Landau, Eisler & Ismail, 2006) and a continuing difficulty with maintaining good blood glucose levels in the long term. The positivist nature of these studies means that the experiences of various distresses are quantified using various measures of depression (e.g. PHQ9, BDI) or diabetes distress (i.e. PAID, DDS) which had the effect of narrowing the experience of self-managing diabetes thus not allowing for an insight into the subjective experiences. RCTs quantify in order to control and manipulate certain

variables and imply causality. However, such studies are often criticised because psychological treatments are only a small part of what constitutes psychological change. To assume that any effects seen in a client is attributable to being caused by the treatment goes against the concept of the client being the agent of change (Bohart, 2000). This is not representative of clinical practice and not suited for answering questions related to why therapies work in some situations but not in others and with some people and not others (Carey & Stiles, 2016; Hans & Hiller, 2013). To account for the heterogeneity of the reported experiences of PWD already noted, RCTs would need to be very large to reach statistical significance, otherwise the study will end up with central tendencies which may not be representative of any one individual (Williams, 2010). There is also the issue that quantifying experiences does not take into account the specific context of the symptoms.

The quantifying of the experiences such as depression is usually by self-report questionnaires rather than clinical interviews and exemplifies the importance of context. For example, Fisher et al. (2007) found that 70% of PWD with elevated scores on self-report measures of depression did not meet the criteria for major depressive disorder when a structured clinical interview was used instead. Therefore, interventions risk being disconnected from what is causing the distress, such as a tendency to disengage from healthy eating behaviours when feeling distressed, not functioning in community or life roles as expected, or self-blame and internalised stigma. This highlighted the possibility that interventions originally developed for major depressive disorders are limited in their ability to alleviate the various distresses of living with diabetes (Aghili et al., 2016; Tovote et al., 2014; Gonzalez, Fisher & Polonsky, 2011).

In terms of targeting the disordered eating patterns in PWD, much of the observations have not translated into interventions specifically targeting these behaviours in PWD, apart from one MBI which will be discussed in the section on MBIs for PWD. This may be due to metabolic dysregulation seen in PWD making it hard to tailor eating disorder treatment to this population,

or the recognition that it is not an isolated problem and is complicated by other difficulties such as depression, age, chronic co-morbidities and insulin treatment (Celik et al., 2014; Gonzalez-Cantú et al., 2017; Webb, Applegate & Grant, 2011). For example, there is evidence that binge eating in T2D is a risk factor for a poor response to weight loss programmes where dietary restraint (e.g. 1200-1800 calories per day) may increase the incidence of binge eating due to feelings of deprivation (Chao et al., 2017). In this case, the binge eating treatment had not been tailored for PWD.

Often the goal of interventions in PWD is to lose weight, but historically this has been shown to be difficult to maintain over time (Chao et al., 2017; Wing, Epstein, Nowalk, Koeske & Hagg, 1985). This could be because those with diabetes tend to be older and possibly not in as good health compared to the non-diabetes population studies. However, there is evidence from the qualitative data, as has already been discussed, that PWD are prone to feelings of stress, failure and defeat and low self-esteem after a continuation of a failure to lose weight (Lyons, 1998; Rubin & Peyrot, 2001). This in turn can have the effect of engaging in particular eating behaviours such as over-eating especially as this is related to stress (Heatherton & Baumeister, 1991; Park et al., 2018; Tak et al., 2015).

1.4 Summary

The examples discussed above show that food is an essential part of family life, social life and wider environment with all their influences and is related to emotions, culture and politics (Knutsen et al., 2017). It is clear that eating patterns and relationships with food are both causative and maintaining factors in T2D. Attempts to modify eating patterns are often challenged by prior eating patterns, which are in turn influenced by a number of factors including self-efficacy, social support and time management (Savoca & Miller, 2001). A life-long history of particular eating patterns, for example eating when under emotional stress, did not always change on diagnosis and different eating behaviours hold different meanings to each person (Karkkainen, Raevuori, Kapiro & Keski-Rahkonen, 2018). Therefore, there are

a number of issues raised in the literature of the difficulties targeting particular behaviours or problems as they are not necessarily common to all PWD. Some behaviours may be more problematic than others and not as well understood, or differ from those often targeted, for example in clinical settings like BED (e.g. Fairburn, 2008). These studies encapsulate a complex interplay of biological, behavioural, emotional, cognitive and social factors. There is a need for a broader range of effective treatments for eating disorders and an understanding of the personal and subjective experiences (Linardon, Fairburn, Fitzsimmons-Craft, Wilfley & Brennan, 2017; Wonderlich et al., 2014). Otherwise, there is a risk of targeting eating behaviours that are not related to PWD or are deemed as central tendencies. Capturing any idea of distress needs to correlate much more fully with the experience of living with and managing diabetes to prevent PWD from giving up on changing behaviours (Dennick, Sturt & Speight, 2017; Rubin & Peyrot, 2001). It is important to avoid making assumptions about the eating behaviours of PWD and there is a need to not only report on the observed struggle for PWD but to have a clearer understanding of the context in which they occur. Therefore, it would seem that rather than focusing on a narrowly-defined mental health issue or clinically-diagnosable eating disorders, a critical element of treatment aimed at PWD, especially type 2 diabetes, would be the modification of a lifetime habit of eating patterns and a specific relationship with food. These are rooted in personal histories and may therefore help us to understand why it is so difficult to change (Yannakoulia, 2006).

The rate of obesity or being overweight is put at 90% in PWD (Gatineau et al., 2014). Obesity is related to losing an ability to differentiate internal sensations (Kaplan & Kaplan, 1957). Therefore, enhancing the awareness of the body has been seen as the key change mechanism in a number of 'third wave' therapeutic approaches, especially mindfulness-based interventions (MBI). Here, the development of body awareness is an inseparable aspect of having an embodied self-awareness which is realised in one's interaction with the environment and the world (Mehling et al., 2011). The next section covers some of the key aspects of mindfulness.

1.5 Mindfulness

Mindfulness has been the topic of numerous research studies in the last two decades. Mindfulness incorporates Buddhist psychology, philosophical and psychological traditions which brings in all of our available senses to better understand what we are responding to and what is going on in the here and now. For example, Kabat-Zinn (1982) demonstrated with his chronic pain patients that although the physicians had done all they could for the body, he was able to bring together the mind and the body to affect a change in their experiences of pain. Mindfulness training has emerged in the past few years as a means of helping people with chronic health conditions. Clinical effectiveness studies in physical health include cancer (Cramer, Lauche, Paul & Dobos, 2012; Smith, Richardson, Hoffman & Pilkington, 2005; Baniasadi, Lotfi kashani & Jamshidifar, 2014; Shennan, Payne & Fenlon, 2011), disturbed eating (Lavender, Gratz & Tull, 2011), obesity (Caldwell, Baime & Wolever, 2012; Sperry et al., 2014), fibromyalgia (Lauche, Cramer, Dobos, Langhorst & Schmidt, 2013), chronic pain (Song, Lu, Chen, Geng & Wang, 2014), cardiovascular disease (Abbott et al., 2014; Griffiths, Camic & Hutton, 2009), respiratory disease (Malpass, Kessler, Sharp & Shaw, 2015) and in chronic medical health generally (Bohlmeijer, Prenger, Taal & Cuijers, 2010).

1.5.1 Background

It is important to understand both the philosophical and psychological roots in Buddhism in order to understand the tradition of mindfulness practices, particularly the original MBSR and resultant MBCT training programmes. There is some concern that Buddhist constructs of mindfulness cannot be transferred in a standalone fashion to Western psychology, as mindfulness loses meaning and arguably efficacy without an understanding of the context from which it came (Kudesia & Nyima, 2015). Teasdale and Chaskalson (2011) argue that this is important because by learning how Buddha understood the patterns of the mind that keep us

suffering, we come to understand which of these are standing in our way of a more satisfying life.

It is beyond the scope of this thesis to fully present the various Buddhist views and metatheoretical assumptions underlying mindfulness practices in Buddhism but it is hoped that some context will show mindfulness as one part of a much bigger worldview and set of practices (Kudesia & Nyima, 2014; Analayo, 2019).

Despite criticisms from some quarters that mindfulness was never supposed to be used to overcome problems such as overeating (Harrington & Dunne, 2015), Analayo (2018) argues that Buddhist mindfulness has always included teachings on weight loss. A Buddhist conceptualisation of mindfulness combines awareness, attention and remembering (Hart, Ivtzan & Hart, 2013). Awareness is when we use all senses and treat the mind as another sense. Attention is the taking notice of stimuli. Buddhism teaches that one needs to be able to learn to recognise that desire and the urge for gratification is an impermanent state of being and is to be experienced as such. The ability to be aware of internal cues and bring a flexible attention capable of shifting to the physical sensations, emotions and perceptual or cognitive processes; and to distinguish between thinking about these sensations and experiencing them directly, is the origin of the conscious experience (Khoury et al., 2017). This means that relying only on conceptual awareness is limiting in respect to how one can relate to oneself, others and the world (Farb et al., 2015), because the (pre)conceptions we hold about ourselves, others and the world thus interfere with the present moment experience. Being in the moment requires a non-evaluative attention to interoceptive sensations, which means embodying the unpleasant experience without trying to get rid of it or to disengage from dysfunctional cognitive patterns (Khoury et al., 2017; Siegel, 2007).

For example, bringing to mind the disadvantages of overeating (i.e. discomfort) would allow the individual to avoid creating new experiences of old feelings of discomfort from overeating. In the absence of bringing these disadvantages to mind and not avoiding them, the cycle of gratification will continue to be habitual. The cravings continue in the absence of bringing the

disadvantages or uncomfortable consequences to mind when experiencing the urge to gratify cravings (Analayo, 2016). This suggests that what is needed is learning to respond to a habit of giving into the desire to eat by bringing awareness to the consequences of over-eating and learning to be with the experience of craving rather than distracting oneself from it (Mason, Jhaveri, Cohn & Brewer, 2017). This needs to be experiential, not just conceptual, as Buddhism situates consciousness in both the mind and the body (Kudesia & Nyima, 2014). This is key to developing a new experiential view; by keeping the conceptual understanding in mind, we can learn to re-perceive (Shapiro, Carlson, Astin & Freedman., 2006) difficulties by learning to be aware of what we actually sense and being with that experience. However, it is difficult to let go of the various desires we are subject to as there is a personal attachment or identification to an enduring self through these desires. For example, with PWD we have seen that emotional eating is an issue which could be conceptualised as being due to identifying with seeing oneself as a failure or as lacking self-esteem. Therefore, a desire to take these negative feelings away by eating is due to an enduring sense of self as this person who is a failure and so on. What this means is that one must let go of the attachment to desire (to overeat) and not take any experience as personal (i.e. not maintaining a negative view of self as a failure as a permanent state). As a result, we can achieve an end to suffering by ceasing to crave our desires. It is the training programme of mindfulness that enables this.

The importance of having this framework for the teaching of the MBSR or MBCT programmes to PWD is to ensure they do not become just the “enfeebled” teaching of techniques (Teasdale, Segal & Williams, 2003, p. 157). The techniques themselves will offer the development of the ability to concentrate and may result in relaxation and other self-help techniques but without an understanding of the nature of the suffering (Purser & Milillo, 2014). Without this, it will not be possible for the teachers to help participants “to focus the application of mindfulness… to transform the processes that create and sustain suffering” (Teasdale & Chaskalson, 2011, p. 100). According to the psychosomatic theory of obesity, obese people eat more because they cannot distinguish between various physiological internal states and

thus confuse stress with hunger (Kaplan & Kaplan, 1957). There is evidence of sub-clinical disordered eating patterns that may occur when someone does not eat according to internal cues of hunger, fullness or satisfaction, with an estimate of one in five PWDs having binges, compulsive overeating or excessive food intake (Gagnon et al., 2012). Therefore, bringing awareness to the interoceptive experiences would be fundamental to the lived experiences of diabetes and self-management via food. This will be discussed in more detail in the section on MBIs and diabetes below.

1.5.2 Definition

In modern secular texts, mindfulness is often operationally defined as becoming aware of moment-by-moment thoughts, emotions and physical sensations in a non-judgemental way (Kabat-Zinn, 1990) or "encouraging all of our senses to notice novelty" (Langer, 2014, p. 45). According to Hanley, Abell, Osborn, Roehrig and Canto (2016), mindfulness is a state of consciousness where phenomena are experienced as clear of biases and preconceptions. Kabat-Zinn (1990) also suggested that intention is an integral part of mindfulness, and combined with 'attention' and 'attitude' provides us with the cornerstones of mindfulness, leading to a shift in our relationship to our experiences (or 'reperceiving') meaning that rather than identifying or engaging with them, we stand back from them (Shapiro et al., 2006). Living in the moment non-judgementally and standing back is particularly relevant for those with diabetes, who often need to make decisions in the absence of any symptoms of ill health, but with difficult and habitual relationships with food.

These definitions therefore position mindfulness as both state and trait. The state of being mindful is often achieved via the application of non-judgmental self-awareness meditation. The definition of meditation is often confined to the physiological changes (e.g. a state of relaxation) achieved by meditation rather than an operational definition. Confusion is likely if there is a failure to distinguish between the various techniques, the states produced and the mechanisms underlying the experiences of the individuals (Awasthi, 2013; Rao, 2011). Traditional definitions of meditation distinguish between focused-attention training (Dharana)

and the meditative state which encloses the feeling of love at its highest level (Dhyana) (Karambelkar, 2006). A useful definition capturing both the Western and Buddhist conceptualisations of meditation is: "…a family of self-regulation practices that focus on training attention and awareness in order to bring mental processes under greater voluntary control and thereby foster general mental well-being and development and/or specific capacities such as calm, clarity, and concentration" (Walsh & Shapiro, 2006, p. 229).

There is also some confusion about the difference between meditation and mindfulness. Meditation is often seen as mindfulness, or the concepts are used interchangeably (Bishop et al., 2004; Brown, Ryan & Creswell, 2007; Kabat-Zinn, 2009). This raises an important issue in the research literature as to whether the construct of mindfulness can be understood above and beyond the actual method of mindfulness training. Therefore, the question of whether mindfulness is conceptualised as a trait (the disposition of being mindful in daily life) or a state (when attention to the here and now experience is intentionally cultivated) is important when examining the literature as this determines what is being measured when it comes to the efficacy of particular studies (Chiesa, 2013).

1.5.3 Theories and characteristics

The introduction of mindfulness to help achieve a change in health behaviours and self-management signalled a move away from beliefs and towards knowing. Belief, as a social cognitive structure in health belief models, refers to expectation of threat to health at some point in the future rather than the direct experience of that threat (or its absence, especially in PWD who do not have any complications). The bringing of awareness to one's experience in the here and now seeks to provide the participant with a means by which to balance the idea of striving towards specific goals with that of believing that changes may occur from practising mindfulness (Segal, Williams & Teasdale, 2002).

While previous theories of different interventions, such as CBT, have focused on the content of consciousness, mindfulness is seen as a quality of consciousness that is inherently

human rather than unnatural. It is the context in which it is expressed that is of utmost importance (Brown et al., 2007). Conscious awareness is our most direct and immediate access to reality, using all of the senses and treating the mind as another sense. Attention is taking notice of stimuli. In a typical human experience, there is a cognitive and emotional reaction to these stimuli which are discriminatory (e.g. good or bad) and determine how they are perceived in relation to the self. This appraisal is conditioned by past experiences and memories and determines whether stimuli are easily assimilated or whether further cognitive effort is required to assimilate them into existing cognitive schemas (Brown et al., 2007). The mindful mode of processing utilises the ability to bring attention to stimuli and maintain an openness to what is there, bringing 'bare awareness' to the facts without filtering them with prior beliefs and self-interpretations. If thoughts and feelings arise, they too should be observed in the same way, which is thought to allow for a more flexible and objective response both psychologically and behaviorally (Brown et al., 2007).

However, information processing is affected by a depressed mood (Teasdale, 1988; Sheppard & Teasdale, 1996) increasing the potential for both the current present-moment events and the material accessed from memory to be interpreted as "highly aversive and uncontrollable" (Teasdale, 1988, p. 253). Dreyfus (2011) suggested that the enhanced cognitive abilities developed through mindfulness and focused attention allows the individual to bring to mind all the various aspects of experiences, so as to enable a much clearer comprehension of the nature of mental and bodily states. By bringing to mind the knowledge that this is not a permanent state of thinking or view of self, that it will pass, this metacognitive awareness helps the participant to shift from evaluating their thoughts as dangerous to seeing them as passing sensations (Wells, 1990).

This shift of perspective helps achieve the meta-mechanics of reperceiving (Shapiro, et al., 2006) where the fundamental components of mindfulness are intention, attention and attitude where intention involves the why of practising, attention is focus and attitude is the

quality one brings to attention. Reperceiving overarches four additional mechanisms: self-regulation; values clarification; cognitive, emotional and behavioural flexibility; and exposure. Through reperceiving, one learns to stand back and begin to shift from seeing 'self as content' (self as object in consciousness) to 'self as context' (consciousness itself). The four additional mechanisms may come about as a result of reperceiving and lead to positive outcomes of mindfulness practice by way of a feedback loop: intention – attention – connection – regulation – order – health.

These processes are seen as qualities of awareness, meta-cognitive skills, self-regulatory capacities and acceptance skills, therefore positioning mindfulness as a cognitive model where a mindful state is being maintained by executive functions and attentional processes (Holas & Jankowski, 2013). The positive effects of mindfulness training are seen to be mediated by decentring ('reperceiving' in Shapiro et al.,2006 terms), decreasing one's self-focus of attention and by developing a more self-compassionate stance. This meta-awareness is related to meta-cognitive processes that enable an open monitoring of the object of one's focus and the cognitive process itself. In a meta-awareness state of mindfulness, there is a decentring rather than an attempt to control the experience which allows for a 'letting go into' the present moment rather than a 'letting go' of the thought processes. This means that attention is freed from attempts to control and is available to be with the present moment experience. The prevention of an automatic response to experiences allows for a process of frequent updating of experience and cognitive processes which facilitate a re-representing of the experience in working memory. According to this model, the most important mechanisms mediating the positive effects of mindfulness are: 1) changes in perception of the nature of internal experiences (decentring or reperceiving); 2) a reduction in self-focused attention (a decrease in the negative influence of ego-related processes on self-regulation); and 3) an attitude of self-compassion (Holas & Jankowski, 2013, p. 240).

1.6 Evidence base for mindfulness with PWD

In this section, the evidence of particular traits of mindfulness that may be associated with self-care behaviours in PWD are considered. Then how MBIs are helping PWD to develop particular traits and the effect this has on their self-care behaviours as measured by blood glucose levels and eating behaviours will be examined.

1.6.1 Self-report measures

Mechanisms of mindfulness are inherently human qualities, and a number of self-report questionnaires are available to measure either the trait (or dispositional) mindfulness in individuals or state mindfulness which is the cultivated and deliberately practised mindfulness skills. By measuring trait mindfulness, it is possible to study if this ability to be mindful is a useful trait to have in relation to managing particular difficulties such as diabetes. If this is the case, learning to be more mindful by cultivating a mindful practice would help to alleviate distress. The diverse needs of managing diabetes could then be met by having a mindful attitude.

There are a number of self-report measures such as the Kentucky Inventory of Mindfulness Skills (KIMS) (Baer, Smith & Allen, 2004) and Freiburg Mindfulness Inventory (FMI) (Buchheld, Grossman & Walach, 2001). However, the most widely-used measures in evidence-based studies are the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003; Carlson & Brown, 2005) and the Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer & Toney, 2006). The MAAS is a 15-item questionnaire used to measure trait mindfulness and uses reverse scoring of mindfulness statements like 'I find myself doing things without paying attention' and a Likert scale of degree of agreement or not. The FFMQ, developed by Baer et al., (2006) examined the facet structure of the mindfulness construct and recognised the need to separate the facets of mindfulness and measure them separately being aware that mindfulness is not simply one thing otherwise there is a risk of obscuring the relationships with other variables. This questionnaire allows for an exploration of the various facets of mindfulness, namely observing, describing, acting with awareness,

non-judgement of inner experience, and non-reactivity to inner experience in relation to other variables of well-being under study. By having these separate facets, it may be possible to understand the nature of the construct of mindfulness.

Observational cross-sectional studies using evidence from self-report measures (using MAAS) on dispositional mindfulness in PWD has been associated with better glucose regulation (Loucks et al., 2016) eating more fruit and vegetables (Fanning, Osborn, Lagotte & Mayberry, 2018) and negatively correlated with uncontrolled eating behaviour (Jordan, Wang, Donatoni & Meier, 2014). However, Annameier et al., (2018) found that if recent uncontrolled eating is reported by participants, then more eating will occur when they are hungry rather than less regardless of dispositional mindfulness. However, MAAS focuses more on attention in the present moment rather than non-reactivity which is possibly more relevant to inhibition in eating behaviours. It is also measuring the absence of a mindfulness trait by the wording of the questions. Grossman (2011) suggested that the MAAS did nothing more than measure "how poorly one thinks they pay attention in everyday life" (p. 1037). He felt that the MAAS did not represent the Buddhist concept of mindfulness and that the questions are answered in a state of ordinary awareness and not when they are performing a deliberate practice of mindfulness. In some cases, questionnaires on mindfulness may not be measuring the same concept as a more directly worded item is measuring or they can cause confusion if not carefully worded (Baer, 2011).

Caluyong et al. (2015) used the FFMQ to measure dispositional mindfulness in non-meditators, but found that these facets did not correlate with diabetes self-care, and the facet of observing was related to a poorer quality of health. In a hierarchical multiple regression analysis, the significant predictors of lower depression were 'acting with awareness', 'nonjudging of inner experiences' and 'nonreactivity to inner experiences'. The association of observing to poorer outcomes can be explained by research showing that the observing subscale was the only one that varied with meditation experience (Baer et al., 2008; Williams, Dalgleish, Karl & Kuyken, 2014) and in mindfulness training observing is taught alongside the skills of decentring and non-reactivity so is understood differently to non-trained individuals.

Van Dam, Hobkirk, Danoff-Burg & Earleywine, (2012) criticised the FFMQ for exhibiting different responses to positive and negative worded items and advised that rather than using the total score the individual scale scores should be used. Tak et al. (2015) used the FFMQ sub scales rather than total score to measure dispositional mindfulness and found a number of facets are associated with particular eating behaviours. They found a negative relationship between mindfulness and emotional eating which is explained by the facets 'describing' 'acting with awareness' and 'being non-judgemental'. Mindfulness is also negatively associated with external eating which is accounted for by 'acting with awareness' and mindfulness is also associated with restrained eating which is accounted for by 'observing' and 'being non-reactive' whilst 'non-judgemental' was negatively associated with restrained eating. 'Acting with awareness' is associated therefore with less impulsive behaviours due to a decrease in the automaticity of behaviour.

One of the limitations of these cross-sectional studies is that although they all targeted eating behaviours, which is a key self-care behaviour for PWD, none of them targeted a heterogeneous group of PWD. In cross-sectional designs, heterogeneity is key to assessing associations and predictive values of any investigation. This limits the ability of the studies to infer which facets of mindfulness predict specific self-care behaviours. However, they do provide some indication that certain facets of mindfulness may be important to eating behaviours across a range of populations and if there is a strong association then the use of MBIs may help to provide more compelling evidence.

1.6.2 Mindfulness-based interventions

Mindfulness-based interventions (MBIs) are training programmes designed to help an individual to develop key mindfulness skills as outlined in the definition section. The key essential ingredients include being informed by theories and practices, being underpinned by an understanding of human distress and how to relieve this. The programme should also help an individual to develop a new relationship with their experience with such key skills of present-

moment focus, decentring, and moving towards the experience rather than away from it. The training programmes should support the development of self-regulation of attention, emotions and behaviours and should encourage home practice (Crane et al., 2017). The key MBIs used in clinical research with PWD that are of interest to this current study are briefly introduced here.

Mindfulness-based stress reduction. Mindfulness-based stress reduction (MBSR) appeared in the literature over 30 years ago (Kabat-Zinn, 1982; Kabat-Zinn, 1990). It is most clearly rooted in eastern philosophy and psychology and is one of the first clinical interventions based on these principles. MBSR is an intensive group-based programme delivered over eight weeks. It focuses on uniting body and mind by bringing awareness to the way thoughts feelings and behaviours can affect and undermine emotional and physical health. Meditations and yoga are used to help cultivate this awareness by training the mind to focus on what is happening internally and externally, moment-by-moment, with an attitude of interest, acceptance and non-judgment.

Mindfulness-based cognitive therapy. Mindfulness-based cognitive therapy (MBCT: Segal, Williams and Teasdale, 2002) is an adaptation of MBSR and is also a group-based eight-week programme for two hours a week. It includes a comprehensive training on the key facets of mindfulness which are potentially the most appropriate to PWD, namely: exposure to difficult thoughts and feelings; a decentred approach to these internal events; and improved self-observation.

1.6.3 Mindfulness and PWD interventions

The literature on the lived experiences of diabetes, and in particular the lived experience of food, has highlighted a number of potential targets for mindfulness training such as blood glucose levels (HbA1c), weight loss, disordered eating, emotional, restrained and external eating, and reduced interoceptive awareness. Despite the increased risk of eating

disorders as reported in some studies (Crow, Kendall, Praus & Thuras, 2001; Kenardy et al., 2001; Papelbaum et al., 2005) there is some consensus that the eating style of PWD is more disordered than clinically defined (Gagnon et al., 2012; Tak et al., 2015). The paucity of qualitative studies on mindfulness interventions with PWD has meant this section mainly focuses on quantitative studies with PWD.

MBIs specifically for PWD is a nascent area of research. The focus has been on the reduction of emotional dysregulation given that this is a common psychological characteristic of disordered eating behaviours and fits with the interoceptive awareness research. It is beyond this review to discuss in detail the growing amount of evidence of body awareness, or more precisely, interoceptive awareness, but it helps to relate the importance of MBIs to eating behaviours. In brief, interoceptive awareness is commonly referred to as the awareness of the physiological state of the body and the interpretative evaluations that arise (Farb et al., 2015). Interoceptive awareness is strongly linked to dispositional mindfulness and both are independently associated with improvements in psychological well-being (Hanley, Mehling & Garland, 2017). Emotional dysregulation is considered a key psychological characteristic of eating disorders (Lavender et al., 2015) and in the general population mindfulness training has been shown to improve emotional regulation by cultivating a more flexible response to both internal and external events (Brown et al., 2007). MBIs are indicated in the facilitation of a number of psychological constructs such as compassion for self, self-acceptance and flexible and adaptive responding to difficult emotions (Katterman , Kleinman, Hood, Nackers, & Corsica, 2014). The ability to distinguish between different internal sensations such as hunger and anxiety is often compromised in disordered eating behaviours (Lavender et al., 2015). In clinical studies, it has been reported that interoceptive awareness can be improved thus leading to a more adaptive response to an accurate appraisal of the internal experience (Lattimore et al., 2017).

Although dispositional mindfulness has been strongly linked to improved interoceptive awareness, the conclusions from the MBIs targeting improved glycaemic control (i.e. being able to be aware and assess the body's condition and respond accordingly) has shown mixed

results. MBIs have been shown to increase glycaemic control and thus reduce the chances of having hypoglycaemic (low blood sugar) or hyperglycaemic (high blood sugar) episodes, leading to a reduction of the mental distress associated with diabetes management (Rosenzweig et al., 2007). Rosenzweig et al. (2007) used a prospective, observational design with a heterogenous group of PWD. They used a standard MBSR programme and measured HbA1c, weight and symptoms of depression and anxiety. They reported that there were no changes in diet but saw a significant reduction in HbA1c levels at the one-month follow-up, and depression and anxiety reduced upon completion of training. However, at the 12-week follow-up, there was no significant change on these post-intervention measures. Unfortunately, they did not measure facets of mindfulness before and after the intervention and there was no control group so it is difficult to determine the mechanisms of change. Van Son, Nyklicek, Pop et al., (2014) reported an RCT of a group MBCT course compared to a waiting list, and a treatment as usual (TAU) group with emotional distress as the primary outcome. The results showed that although perceived stress, anxiety and depressive symptoms reduced immediately after the course and six months later, there was no effect of the MBCT on diabetes-related distress or blood glucose levels. One of the limitations was that the baseline measures were already fairly good for HbA1c and the diabetes distress was only elevated in a minority of the participants, so were not typical of those who are struggling with managing their diabetes. There was also the inclusion of T1D which is a different condition and is managed with insulin, so potentially the emotional distress may have different qualities and pathogenesis. The other limitation was the lack of measurements of mindfulness so again determining the potential mechanisms of change are not available to confirm or disconfirm the associated facets of mindfulness for self-managing behaviours in PWD already discussed.

There are a number of targets for MBIs, but the most common targets in PWD is weight loss and eating behaviours. In a slight move away from targeting specific eating behaviours, Miller and colleagues (Miller, Kristeller, Headings, Nagaraja & Miser, 2012; Miller, Kristeller, Headings & Nagaraja, 2014) used a modified version of a binge eating programme (Kristeller & Wolever, 2011) for diabetes (MB-EAT-D) which was designed to interrupt mindless eating

and bring awareness to physiological processes to regulate eating. Every session included guided meditations oriented to the experiences of eating, including thoughts and feelings. They also aimed to cultivate the awareness of emotional versus physical cues to eat, and preferences of food items. They were encouraged to engage in formal meditation practices six days a week and conduct informal practices at other times. The control group received diabetes education and support. Both groups lost weight but due to different mechanisms: The control group received education on healthy food choices therefore making changes in what they ate, and the MBI group lost weight due to changing the awareness of eating (the how and why of eating) rather than promoting change in what was eaten. This suggests that MBI for PWD could be improved by including diabetes self-management education. Conversely, it demonstrated that at least in the short term (three months) they are both effective because of the heterogeneity of presenting eating behaviours. It could be argued that choosing food more carefully requires both awareness and attention, so this may have indirectly affected eating behaviours. It is unknown if the distress was related to diet as the subscales of the Problem Areas In Diabetes scale (PAID) (Polonsky et al., 1995) were not tested separately. However, if it was related then maybe diabetes and nutrition education would be indicated. If the distress was related to a deficit of inner awareness of sensations, then potentially MBIs would be more useful. This has yet to be tested.

Understanding the reason for these discrepancies may lie in the qualitative studies that consistently illustrate that PWD report feelings of shame, self-blame and stigma. Perhaps the most important and powerful effects of MBIs on PWD has been the work on the commonly-experienced sense of shame and stigma using compassion, by increasing self-compassion. Compassion is regarded as the sensitivity to suffering and a desire to alleviate it (Goetz, Keltner & Simon-Thomas, 2010). Self-compassion is inwardly directed compassion and allowing oneself to be the object of care (Neff, 2003). We have already noted that PWD suffer and give up on being able to care for themselves. There is no apparent desire to alleviate their suffering other than giving into the desire to eat as a maladaptive way of regulating their emotions. To have self-compassion, one has to have a mindful awareness of the experience

of suffering and be open to this experience without avoidance or judgement (Neff & Dahm, 2015). Gilbert (2009) suggested that self-compassion is related to a biological system of attachment which activates safety-seeking behaviour in a child by seeking proximity to care-givers when distressed. If this behaviour is successful in reducing the distress then the child is likely to grow up carrying this secure internal model of attachment in order to self-soothe. If attempts to seek proximity however are constantly thwarted, the child may grow up with insecure attachment styles, i.e. anxious or avoidant styles, and be less able to self-soothe (Gilbert & Proctor, 2006). This aspect in particular makes self-compassion a broader construct than mindfulness, as it is possible to become mindful of a painful emotion or thought but without the ability to self-soothe (Neff & Dahm, 2015). However, studies have been able to demonstrate an increase in self-compassion from being trained in mindfulness and this is seen as a key mechanism of change (Baer, 2010; Kuyken et al., 2010). Despite this, the updated edition of MBCT (Segal, Williams & Teasdale, 2013) suggests that self-compassion should not be directly discussed but should be embodied by the instructors, thus allowing for an experiential learning of self-compassion.

This goes against the more recent studies which suggest that direct targeting of self-compassion would be particularly beneficial for PWD. Friis, Johnson, Cutfield and Consedine, (2016) looked at the available data related to how self-compassion may be able to promote better outcomes in PWD and concluded that a reduction in negative self-evaluation and improved motivation for self-care underpins the benefits of self-compassion. This resulted in an RCT of a mindful self-compassion intervention (MSC) (Neff & Germer, 2012) and found self-compassion buffered the negative effects of distress on HbA1c levels (Friis et al., 2016). This is also echoed in observational studies (Ferrari, Dal Cin & Steele, 2017; Ventura et al., 2018) who found that higher levels of self-compassion were associated with better self-management behaviours and HbA1c levels. However, one limitation was the inclusion of data from T1D when it had been shown that the distress relating to T2D is related to shame and self-blame from being overweight or obese which is not a contributing factor for T1D. This is also associated with social and internalised stigma in T2D.

1.7 Mindfulness and new eating behaviours

MBIs for helping PWD improve their self-management need to have an understanding of the processes that underlie behaviour change techniques (Michie et al., 2018). As already discussed, one of the key relationships for people with T2D is that with food, it is often the means by which diabetes develops in those with T2D and the way in which diabetes is managed. Mindfulness interventions have increasingly targeted the eating behaviours and the next section will address some of the key mechanisms that underlie the process of changing this behaviour and why for some PWD this may be difficult to do.

1.7.1 Key mechanisms

There is a paucity of studies looking at the mechanisms of change in PWD following an MBI for changing eating behaviour with only two notable studies by Miller and colleagues (Miller et al., 2012; Miller et al., 2014). Given the central role of eating for managing diabetes, this is surprising. There are a number of observational studies showing that mindfulness is associated with better glycaemic control. However, it seems that these observations have not been translated into interventions. Therefore, this discussion focuses on the theorised mechanisms of change in general and how this has been translated as mechanisms for change in PWD.

Baer (2009) discusses the role of self-focus as a mechanism to improved psychological well-being. She makes a distinction between the ruminative self-focus that can increase distress with the reflective, open-minded, experiential self-focus which involves an awareness of the present moment that is associated with adaptive outcomes (Watkins & Teasdale, 2001). This kind of self-focus is non-judgemental to what it becomes aware of and is non-reactive. Mindful observation of thoughts cultivates this ability to decentre. In the conceptualisation of MBCT by Segal et al. (2002) decentring is seen as the central mechanism in preventing relapse of depression. The process of desensitisation occurs when difficult emotions are faced without an attempt to escape from them. Mindfulness self-observation helps to facilitate

behavioural self-regulation which leads to a more adaptive response than the short-term gains from maladaptive responses (e.g. emotional eating).

One meta-synthesis of qualitative studies on how MBCT contributes to therapeutic change produced five major themes: taking control through understanding, awareness and acceptance; impact of the group; taking skills into everyday life; feelings towards self; and role of expectations (Cairns & Murray, 2013). This suggests that how one feels about themselves was developed as a result of how much they could take control of their lives and bring new skills into everyday life but also by their expectations of what the specific MBI would do (e.g. 'cure' them). These potential mechanisms would require a skilled teacher to be able to assess how these aspects may impinge on the change process.

One study (Cebolla et al., 2018) looked specifically at the effects of mindfulness training on health and well-being and found that meditators compared with non-meditators had greater attentional control on body awareness and non-reactivity, and of body awareness on non-reactivity as measured by the subscale of non-reactivity to inner experience from the FFMQ (Baer et al., 2008) and the body awareness factor from the Scale of Body Connection (Price & Thompson, 2007). Body awareness had a positive effect on non-reactivity, suggesting that it is important to emphasise this mechanism in health-related MBIs (Cebolla et al., 2018). In a study by Carmody, Baer, Lykins and Olendzki (2009) where it was noted that in the meditations that focused on the body, non-reactivity was the only facet involved in all of them. Warren, Smith and Ashwell (2017) conducted a review of MBIs for eating behaviours and concluded that the key mechanisms were an increased awareness of, and increased responsiveness to, internal cues; an increased awareness of, and reduced responsiveness to, internal emotional cues; and an increased awareness of, and reduced responsiveness to, external cues.

One of the key tasks in establishing the mechanisms of action is to identify the mechanisms that are altered by the treatment and that explain at least part of the effects of the treatment on outcomes. One of the key mechanisms isolated in a study by Kuyken et al.

(2010) was that of an enhanced self-compassion and this was seen to be a key skill learnt from undertaking MBCT. They found that increases in mindfulness and self-compassion mediated the effect of an MBCT programme on the symptoms of depression at a 15-month follow-up. This role for self-compassion (Gilbert, 2009) is seen as an adaptive response in the face of negative thoughts and emotions. This need to accept internal experiences without acting on them is recognised as a key psychological problem, along with emotional regulation skills which are also involved in eating pathology and which therefore needs to be targeted by MBIs (Lavender et al., 2011; Lattimore et al., 2017).

Reviews that are specifically aimed at how facets of mindfulness relate to disordered eating, again quantitative only, indicated that the targeting of emotional and sensory cues (O'Reilly, Cook, Spruijt-Metz & Black, 2014) and focusing specifically on the eating behaviour would help efficacy of mindfulness programmes (Godfrey, Gallo & Afari, 2015). This was also highlighted in Mantzios and Wilson's (2015) review studies focusing on attentive and mindful eating were more effective in the short term than generic mindfulness courses. However, they did note that mindful eating may not necessarily promote mindful living and that, including self-compassion training, assists in weight management.

1.7.2 Problems in changing behaviour

A related topic in relation to self-management issues and interventions, including eating behaviours, is the risk of cognitive decline. A number of studies have looked at people with T2D and compared them to people without diabetes in a range of cognitive tasks, such as processing speeds, memory and executive function (Munshi et al., 2006; Biessels, Deary & Ryan, 2008; McCrimmon, Ryan & Frier, 2012; Cukierman-Yaffe, 2014; Cuevas, 2017). Impaired learning ability is seen in T2D and not in T1D which may have implications for self-management over time and is not always screened for in primary care (McCrimmon et al., 2012). The evidence seems to indicate that although the cognitive dysfunction is mild and rarely meets criteria for clinically significant impairment, it does tend to start in the prediabetes stage and worsen over time. Munshi (2017) suggested that those with T2D are at a 1.5 to two-

fold increased risk of dementia, and that there was a 19% greater risk of cognitive decline compared to those without diabetes. The importance of memory is demonstrated in a study by Higgs (2008) who showed how the memory of eating can affect how much and what is eaten based on an integration of sensory, somatic and contextual inputs from memory thus contributing to weight gain. Further to this is research by Coppin, Nolan-Poupart, Jones-Gotman and Small (2014) who found that overweight and obese individuals were impaired on a working memory task which they suggested was due to adaptations in the dopamine systems in response to overeating. This fits with Kaplan and Kaplan's (1957) psychosomatic theory of obesity which suggests that obese individuals lose the ability to differentiate between different internal physiological sensations. Age and depression also exacerbated any cognitive impairments (Tomlin & Sinclair, 2016). Black et al. (2018) argue from a neuropsychological point of view that not only does depression increase the risk of hyperglycaemia and that this relationship is bidirectional, but that there is a direct path between depression and executive function. Diabetes management is therefore affected directly by executive function and has a bidirectional relationship with hyperglycemia.

In contrast, there have also been a number of studies looking at the effect of mindfulness training on the aging brain using MRI brain scans and behavioural assessments. One such study by Cotier, Zhang and Lee (2017) compared a group receiving mindfulness training (attention-based compassion meditation) with a group receiving relaxation classes. Using an emotion processing task, they found weaker valence and arousal responses after the eight-week training, whereas it remained unchanged in the relaxation group. They linked these changes to network changes in the brain which they found to be consistent with a movement towards a decreased self-focus and a more neutralised affective style. They concluded that this was indicative of more efficient processing and that mindfulness may therefore be beneficial for the elderly. Limitations include the mean age of 64 years may not be regarded as elderly and there was no follow-up. Mind-body exercises such as tai chi have also been shown to have a positive effect on cognitively intact and impaired older adults in terms of improving cognitive flexibility, working memory and learning (Wu, Yi, Zheng et al.,

2018). Increasing the element of these kind of meditations, such as mindful walking or yoga exercises, may prove useful therefore in the MBCT programmes aimed at PWD. There was no indication in this study of how these effects come about, so this remains unclear.

There is also some evidence that mindless eating increases when an individual is distracted, as long there is enough remaining capacity to do the actual eating (Ogden et al., 2012). They suggested that watching TV is the perfect distraction for mindless eating as it allows for this remaining capacity but also avoids social stigma as it is done in their own homes. These sorts of situations may therefore be risk situations that would be useful to include in exposure exercises on the MBI. Another issue is the need for continuity of mindfulness to allow for new experiences of not giving into urges to eat in order to avoid or distract themselves from bad feelings to sink in and thus reduce the cravings (Analayo, 2016). Like exercise, mindfulness requires regular practice to "reap its benefits and come to understand why it is so valuable" (Kabat-Zinn, 1996, p. 21). MBIs invite participants to engage in formal and informal practices following a course of mindfulness but there are some inconsistencies on the effects of different types of home practices. For example, Birtwell, Williams, van Marwijk, Armitage & Sheffield (2018) report that the frequency of informal practices is more important for psychological flexibility and well-being than the frequency and duration of formal practice. Cebolla et al. (2018) also found that the key mindfulness skill of observing was predicted by the frequency of informal mindfulness practice. However, this is in contrast to Carmody and Baer's (2008) study which suggest that the formal practices affect the facets of mindfulness rather than the informal. Although it should be noted that the different outcomes from these studies might be because observing is factored out in the Cebolla et al. (2018) study.

Mindfulness practice has been likened to exercise in terms of adherence difficulties and there is some evidence that the perceived level of problems related to not practising will determine engagement in mindfulness meditations (Rizer, Fagan, Kilmon & Rath, 2016). This may be a particular issue for those with diabetes who remain symptomless who may therefore not see any immediate benefits on their health.

1.7.3. Adverse reactions to MBIs

There is some evidence that meditation, which is used to help cultivate mindfulness in MBIs, can be harmful to some people. An example of the potential harm meditating can do is outlined in an early case study by Walsh and Roche (1979) which concluded that although a combination of intensive meditation, fasting, sleep deprivation and a history of schizophrenia can bring on a psychotic episode, these are rare and "even psychologically healthy individuals may experience changes in their perception of reality during the initial phase of intensive meditation" (p. 1086), but that this was not necessarily pathological. However, how one makes sense of such distressing experiences depends on the context and the meaning-making framework. Whereas Western psychology may see meditation as exacerbating a mental illness, Buddhist teachers would see it as a sign of progression through the stages of insight and the eventual cessation of suffering (Compson, 2018). Shapiro (1992) collected data on 27 long-term meditators who had signed up for either a two-week or three-month intensive mindfulness meditation retreat designed to observe the mind and develop concentration. They were instructed to use 'bare awareness' to observe whatever comes into their awareness during silent meditation for a minimum of ten hours a day. Although there were significantly more positive effects reported, 7.4% experienced profound adverse effects. Those who had practised meditation the longest (over 8.5 years) had the highest frequency of negative effects and those with less than two years' practice reported fewer adverse effects. The nature of these effects included anxiety, depression, tension, confusion, impaired reality testing, disorientation and reduced motivation in life. Their motivations for enrolling on the retreat, and the existence of pre-existing conditions that might predispose them to adverse effects, were unclear. The use of focused attention is particularly indicated in distressing experiences, but without a framework to work through difficult experiences, or a teacher who can use the Buddhist framework of understanding the stages of insight, there is a risk that the growth and insight is treated as pathological and psychotherapy is the remedy (Compson, 2018). A more recent online survey conducted by Cebolla, Demarzo, Martins, Soler and Garcia-Campayo (2017) on people with at least two months' meditation experience found that one quarter

reported unwanted effects as a result of meditation. These tended to happen when they were meditating for longer than 20 minutes on their own, and were associated more with focused-attention practices. The main unwanted effect was anxiety, although this did not require medical assistance and did not lead to a discontinuation of mindfulness practices. Van Dam et al. (2018) were particularly critical about the lack of reporting on adverse effects in trials of mindfulness interventions. They reported that unlike the pharmacology sector, which has a 100% record of assessing adverse reactions in clinical trials, only 25% of mindfulness trials do so. Reflecting on the inconsistencies in the literature or lack of adequate reporting of adverse effects, Dobkin, Irving and Amar (2011) encourage reporting of adverse reactions and the consideration of pre-programme screening to MBSR groups.

This also points to the particular needs of training the instructors to a standard as set out by the Good Practice Guidance (UK Network for Mindfulness-Based Teacher Training Organisations, 2015). There is a growing need to ensure teachers have undertaken an approved training course and have their own personal practice. Teachers of mindfulness are also encouraged to register on a UK listing which, since 2017, means they also have to demonstrate that they have met the guidelines (UK Network for Mindfulness-Based Teacher Training Organisations, 2019). But perhaps more essential is that the teacher has the capacity to embody the qualities and attitude of mindfulness and can use these skills to participate in the learning process. In the case of delivering the programme to PWD, there would be a need to have knowledge and experience backed up by professional training on diabetes and the knowledge of effect this may have on the process of teaching (Crane et al., 2017). For example, imbalances in health-related behaviours in those using meditation may occur, such as not getting enough sleep and poor diets, which may be particularly pertinent to PWD. The teacher needs to understand the PWD with regards these potential imbalances. There is also a particular concern about the lack of support for people who have finished a course and are left to practise on their own. This can result in having no support to take them through potential stages of insight that come later in the process which could lead to distress but no means of making sense of this (Compson. 2018).

1.8 Study aims and rationale

The definition of mindfulness for the current study is that it is "…the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to things as they are" (Williams, Teasdale, Segal et al., 2007, p. 47). This includes an expansion on the concept of non-judgement: "Non-judgemental means to be aware of how judgmental the mind can be, and as best we can, not getting caught in it or recognising when we are and not compounding our suffering by judging our judging" (Kabat-Zinn, 2017, p. 1127). The awareness of the context and environment in which the experience is taking place is also important, given that the mind is both "embodied and embedded" (Thompson & Verela, 2001), and how we interact with that environment is part of the creation of consciousness (Geuter, 2016). This definition applies to mindfulness interventions for PWD based on the literature which highlights a wide range of potential target behaviours and vulnerabilities.

Much of the literature to date has evaluated and assessed the outcomes of interventions but often, the patient's voice is either limited or missing. For example, observational studies show there is a dynamic interplay between an individuals' biological and personal characteristics, social, family and the wider environment as well as the heterogeneity of behaviour. However, this lived experience of such dynamic interplays is poorly represented in the interventions available and past relationships with food as well as current relationships needing to inform the necessary tailoring of interventions. Instead, many of the studies on interventions are RCTs and have focused on alleviating depression with mixed results on impacting the ability to manage their blood glucose levels. RCTs are not thought to be the best design to answer questions of importance to clinicians in terms of applying findings to real-life situations. Although it is recognised that PWD have elevated risks of eating disorders, especially binge eating, this is not the case for many PWD. Therefore, interventions focused on clinical eating behaviours may not always be appropriate as the issues with food may not fulfil the criteria of a clinically-diagnosable eating disorder such as BED. There is a risk that

such interventions may not be properly tailored to meet the specific needs of PWD (Chao et al., 2017).

It is clear that there is no one intervention for PWD to help manage their diabetes successfully or over the long term. The qualitative data has shown what the nature of their suffering is and what facets of mindfulness may be in play that shows most promise. For those with problems with their self-management of diabetes, help is needed to find the specific issues preventing optimal self-care. This study is aimed at what people with diabetes experience in their relationship to food in order to help open up the narrative on what 'sticking points' remain since finishing a course in MBCT and to find their own words and concepts that fit with this lived experience rather than borrowing concepts from the literature on eating disorders and psychopathological difficulties.

Kelly and Barker (2016) suggested that one should play detective and go back to the preceding patterns and practices which led to the difficulties rather than use a "single unilinear model of causation based on long range predictions about hoped for behaviour change" (p. 114). To see things from the participants' perspective rather than merely the research observer will help to reduce the aggregation of broadly defined behaviours like eating. This construction of personal accounts would help identify perhaps typical, real-world conditions that precede the eating behaviours and identify the elements and the meanings that the people doing the behaviour give them. It is down to researchers to unravel the connections between the meanings and the competencies that PWD display (Kelly & Barker, 2016).

MBI programmes for PWD should reflect the general vulnerabilities that characterise the human condition, and how these co-exist with the specific vulnerabilities and life circumstances of PWD (Crane et al., 2017). There therefore needs to be a clear specification of the characteristic issues and vulnerabilities of PWD, including how they are triggered and maintained, so that MBIs have clear targets for the elements in the programme that mediate change for this population. In keeping with a counselling psychology pluralistic approach, this

study aims to understand from personal accounts from people with diabetes the nature of their self-management issues and how these are targeted in interventions, which will then indicate the mechanisms that need to be targeted. It is also important to add to a body of work that reflects the lived experiences of people living with diabetes, rather than using concepts that may not be relevant to PWD. In doing so, this study will provide insight into the specific vulnerabilities of a small group of PWD and that the data generated will help to put the individuals' lived experiences at the centre of the ongoing narrative about the complexities of living with diabetes and thus help shape the interventions for them. This will also help meet the need for specialist knowledge, experience and training with regards to the programme's target population, including on how the teaching should be delivered according to context and population group. This aspect is of particular significance to this study with regards to its rationale as it is vital that there is sensitivity to the difficulties they are experiencing.

1.9 Research question

The main difficulty that PWD face is maintaining blood glucose levels. A key aspect and the main interest of this study is the relationship PWD have with food. This study investigates their relationship with food since the application of mindfulness training, to explore the impact on everyday lived experiences of managing this aspect of diabetes. This will give a clearer idea of how MBIs might be helpful for those who do not have pathological conditions, such as a diagnosable eating disorder but who may continue to struggle with what they eat and how they eat and why they eat the food they do.

The research question is therefore: "How do people with type 2 diabetes experience their relationship to food following a mindfulness course?"

CHAPTER 2: Methodology

2.1 Introduction

In this chapter I will account for the methodological approach taken in this study in order to address the research question restated below in Section 2.2. The philosophical assumptions underpinning the approach will be examined along with a discussion of the rationale for addressing the research question with a qualitative research methodology. Considerations of the researcher's epistemological stance and how measures of trustworthiness and validity within the research process were used are discussed herein. A brief comparison with alternative qualitative research approaches are described and conclusions drawn from such considerations are explained to provide a robust rationale for the present methodological approach. An overview of the ethical considerations is made and information about the participant selection and data collection processes are described. The analytical process including the strategy used is also described. Finally, a reflexive piece on the methodology and on my personal experience will conclude this chapter.

2.2 Methodology

Research question: *How do people with type 2 diabetes experience their relationship with food following a mindfulness course?*

This question had come from a broader curiosity in my workplace about how the participants made sense of what was going on in relation to their mental and physical well-being following a course in mindfulness. As Mason (2002) suggested, research questions should be devices for guiding and focusing the enquiry, and my question pointed me in the direction of an interpretivist perspective.

My enquiry was guided by the literature review in the Introduction chapter 1 where I discovered that although there were a number of studies on the lived experience of having diabetes, there were few studies to date specifically focusing on how people living with

diabetes experience their relationship with food. There were also only a few studies using an interpretivist perspective on the experience of mindfulness (Higginson & Mansell, 2008; Keyworth et al., 2014; Long, 2014; Mathias, Parry-Jones & Huws, 2014). Although in many of these studies there are discussions about what other psychological processes may be at work, they did not seem to be being investigated further in subsequent intervention research. Other processes such as denial of condition, problems with acceptance and adapting, lack of education, problems with being able to identify danger signals, anxiety about the future, and depression about what they have lost, seemed to be key themes in the discussion sections of the literature. What was missing was further exploration of these potentially important experiences and influences for the participants. It therefore seemed that these 'lived-experiences' required a rich, textured description of how people with diabetes experience an important and particular aspect of living with diabetes. I was also interested in this experience in the context of having completed a mindfulness-based intervention (MBI). This can add valuable insights to the quantitative studies on the influence of an MBI on the self-management of diabetes and the possible mechanisms of change (e.g. Frearson, 2006). It was felt that an understanding of how someone within this context would make sense of an aspect of living with diabetes could potentially add to the literature on this topic, or at the very least help to shed some light on some of the quantitative research. Food is an essential part of life and involves a number of networks: social, family, and the wider environment with all their influences and is related to emotions, culture and politics (Knutsen, Foss, Todorova, et al., 2017). The experience of the relationship to food impacts on the self-management of diabetes. It encapsulates a complex interplay of biological, behavioural, emotional and cognitive factors which emerge in their daily lives.

2.3 Epistemological considerations and reflections

Willig (2012) stated that philosophical reflection is essential in identifying one's own epistemological position. These are the assumptions one makes about knowledge and how

we can know. This process at the outset of the research process helps to guide the analysis and evaluation of the research as detailed in the following sections of this chapter.

Methodology is informed by the epistemology, or the way in which things can be known, which in light of the question asked, I have made the assumption that we can know the world by how we experience it. This critical realist philosophy subscribes to the view that there is an independent real world but that our understanding of this world is constructed by our perceptions, beliefs and interpretations (Maxwell, 2012; Taylor, 2018). Hansen (2004) described how psychology in the 20th century was dominated by the epistemology of modernism which asserted that researchers could overcome any perceptual biases and see reality as it really was. Research utilised scientific methods to eliminate biases in order to be able to know the truth. This knowledge was said to mirror objective reality. Postmodernism, however, asserted that knowledge represents a combination of the researcher and participant and that therefore truth was not discovered but created. In the context of research, it assumed that meaning will therefore be co-constructed between researcher and participant recognising the researcher as an active component in making sense (Strawbridge & Woolfe, 2010). The ontological question is about the assertion that an independent reality exists. For some 'antirealists', there are only knowers rather than a reality. On the other hand is the claim that reality does exist but it can never be truly known as we all bring our own meanings which inform our perceptions of that reality (Hansen, 2004).

The ontological stance, or the theory of the way the world is, which influences the critical realist epistemology is a relativist ontology, meaning that what matters is how a person experiences a given phenomenon and that there may be different interpretations of the same event. It is from this premise that a qualitative method of enquiry was adopted to produce a piece of research that gave a voice to the participants in a way that quantitative methods could not. The intention was to describe and interpret experience rather than to quantify a phenomenon or predict causal relationships (Smith et al., 2009) in the way previous research on this topic has done. I accept that all research is descriptive of something and all observations are dependent on a prior framework of explanation no matter how well one feels

able to bracket this off (Rawson, 2011). Despite this, I hold the view that the lived experience shapes how we think about ourselves and that the individual is a rich source of data relating to how one makes sense of experiences. This type of query lent itself to a methodology within the phenomenologically informed approaches. The relativist ontology is key to underpinning the methodological choice of using Interpretative Phenomenological Analysis (IPA) as it was a good fit with an area of interest which thus far has produced a broad range of conclusions.

2.4 Rationale for choice of methodology

There are a number of ways in which the different qualitative approaches overlap but each one has a different focus or reason for being used. One of the criticisms of IPA is that it relies on the assumption that participants can use language to express their inner experience (Willig, 2008) and that it overlooks the construction of language or, indeed as discourse analysis would focus on, how 'reality' is constructed through language.

Discourse analysis (DA) originated as a criticism against the 'cognitivism' of psychology at the time which was promoting the idea that cognitions had a "central role in shaping perception and action" (Edwards & Potter, 1992, p. 13). Potter and Wetherell (1987) were influential in a developing interest in the field of psychology: language as social performance, a discourse that began in the 1950s. It has a social constructionist epistemology which means that language is more than a 'mirror of the world' and phenomena 'out-there', and that discourse (the capacity to communicate) is of central importance in constructing the ideas, social processes, and phenomena that make up our social world. The challenge was on mainstream psychology and the assumption that language was able to label internal states and external reality (Willig, 2013). The idea that cognitions shaped perception and actions was based on five key assumptions:

1. That talk is the route to cognitions
2. That cognitions were based on perception
3. The belief that objective perception of reality was theoretically possible

4. That there are consensual objects of thought
5. That cognitive structures are relatively enduring (Willig, 2015, p. 144).

The criticisms from DA centred on these assumptions by suggesting that 'talk' needs to be understood in terms of social action and should be analysed in terms of what it achieves within a given social context. It is through language that objects and events are constructed because it is through discourse and conversation that meanings are given to them. So rather than there being an objective perception of reality, language constructs rather than represents this reality. DA also makes the point that there is no consensus of thoughts about objects. This is because social objects are constructed through language so one person's version may be different to another's and therefore attitudes are due to discursive constructions of the object itself. And finally, what people say tells us more about what they are doing with their words (e.g. blaming, complaining, excusing, etc) rather than representing a cognitive structure (Willig, 2015). Therefore, DA "involves a theoretical way of understanding the nature of discourse and the nature of psychological phenomena" (Billig, 1997, p. 43).

The focus in DA is on how people use discursive resources and what affects the 'action orientation' of talk, taking into account the "structural conventions of a particular setting" (Larkin, 2015, p. 252). Therefore, the interest is on what the speakers are doing with their talk (Willig, 2015). Although 'real world' settings would make the ideal source of data, the ethical and pragmatic difficulties involved have required the use of semi-structured interviews, though unlike IPA when transcribing, the non-linguistic ways in which something is said is as important as the words used (Willig, 2015).

The use of this particular methodology which takes a constructionist stance epistemologically, would have been useful if the question I was asking was: "How do people talk about diabetes following a course in mindfulness?" This constructionist approach to the data in the analysis would ask the question: "What is the discourse doing?" not forgetting that the researcher is inevitably part of the action. A slightly different approach is the Foucauldian discourse analysis which is more interested in "mapping the discursive environment that people inhabit" (Willig, 2015, p. 155). Therefore, the sort of question this would help to answer

in relation to my topic is: “What discourses do participants draw on in their talk about their diabetes following a course in mindfulness and what implications do these have on the participants experience of living with diabetes?” The interest lies in the discursive resources available to the participant and how this availability may shape their experience of living with diabetes after a course in mindfulness.

As a methodology, the use of IPA is determined by the ontological and epistemological underpinnings of the research and for some researchers this is considered as a constraint of the approach. In contrast, thematic analysis (TA) which, according to Clarke and Braun (2018), is seen as a method rather than a methodology has a flexibility that IPA does not have. This does not mean TA is atheoretical as the ontological and epistemological underpinnings need to be transparent in the research which employs this method. However, it does not stem from any particular theoretical framework, or as Clarke and Braun (2018) put it: “TA is best thought of as an umbrella term for a wide variety of approaches” (p. 108). TA was considered for this study as it has often been utilised in the identification and analysis of patterns in qualitative data especially in studies involving health as espoused by Braun and Clarke (2014). The first and enduring attempt to ‘brand’ TA was by Braun and Clarke (2006) who saw it as “a rarely acknowledged, yet widely used qualitative analytical method” (p. 77). Its flexibility is seen as enabling it to be used both to ‘reflect reality and to unpick or unravel the surface of reality’ (Braun & Clarke, 2006, p. 81).

Therefore, TA can be underpinned by the same theoretical framework as IPA, namely phenomenology. However, unlike IPA, it does not take an idiographic focus but instead looks for patterns of themes across the whole data set whereas IPA stays close to the data items of the individual participants. In IPA, this is done by developing a set of emergent themes in the individual transcripts which leads to superordinate themes. This is done for each data item before moving to the next. TA develops themes from the codes across the whole data set, thus making it a method that is useful when the research question does not focus on the individuals’ lived experiences but rather on a larger group where the focus is on the patterns of meaning across the whole data set collected. TA acknowledges that these themes are

"active creations" (Clarke & Braun, 2018, p. 108) of the researcher rather than merely emerging from the data. Clarke and Braun (2018) suggested that themes could usefully be regarded as key characters of a story and can highlight shared meanings as well as divergence. Although it is often regarded as a method for describing data, Clarke and Braun (2014) have argued that it can also be used in critical qualitative approaches.

TA is particularly useful in the field of embodiment where the key assumptions are that the body functions as a constituent of the mind rather than serving the mind (Leitan & Chaffey, 2014). For example, a study by Frith and Gleeson (2004) used TA to study embodiment in the use of clothing in men and how their subjective feelings about their bodies influenced their choice of clothes. Embodied cognitions therefore provide a useful framework for TA research looking at practices such as eating which is seen as an embodied practice (e.g. Natvik, Gjengedal, Moltu & Raheim, 2014) or body image and health behaviours (e.g. Frith & Gleeson, 2004; Brown, Zavestoski, McCormick, Mayer, Morello-Frosch, & Altman,.2004) in which TA can be used as a tool. Braun and Clarke (2014) recognise the flexibility and variability of using TA in health related topics particularly in policy and practice research.

The type of question that could be asked in using TA within a phenomenological framework is: "How does having type 2 diabetes influence the relationship with food?" Again, this is an interesting question and may well bring up similar findings to an IPA approach but what drives this current research is to make it possible to allow the individuals' voice to come through by staying close to the data items and what was actually said by the participants. TA would lose the idiographic focus that is key to this study.

Discourse Analysis, including the Foucauldian approach, largely ignores the role of the body and emotions in making sense of the lived experience whereas thematic analysis has interesting questions to ask on the topic in question but loses the idiographic focus. Gendlin (1997) suggested that the lived body was a source of understanding and that both language and experience were needed for knowing to occur. Therefore, it is believed that the participants' narrative will potentially arise from what their bodies already know, and as Willig (2013) highlighted, that once a particular experience has been identified we "know that it is

available within a culture or society" (p. 25). This allows the experiences of the participants to be part of a broader and deeper debate about the issues of relating to food from the perspective of having diabetes.

Therefore, I believe IPA, despite the recognition of the limitations of language and of discourse in general, would enable the 'lived experience' data that would help inform my question of "How do people with type 2 diabetes experience their relationship with food following a course in mindfulness?" and add to a growing body of knowledge in the use, and issues, of mindfulness as an intervention.

2.5 Philosophical underpinnings of IPA

There are a number of phenomenological methodologies but because this research is interested in the particular, the centrality and meaning of the participants' subjective experiences (idiography), and of hermeneutics, interpretative phenomenological analysis (IPA) was chosen as the methodology to capture how participants experienced the relationship between the lived experience and the body experience (Finlay 2006).

Phenomenological psychology is a philosophical movement rooted in the work of Husserl in the 1900s. He argued for the focus to be on people's perception of the world in which they live and what this means to them. By investigating "whatever appears as such" through epoché (bracketing off our own preconceptions and assumptions), it is possible to get to the essence of a phenomenon (Husserl, 1927). Heidegger, who dedicated his book *Sein und Zeit* (Being and Time) to Husserl, argued for the return to the question of 'being' *"*as a thematic question of actual investigation*"* (Heidegger, 1927, p. 1). He argued against the ontological position of the time that placed 'being' as a universal and self-evident concept and therefore "understandable 'without further ado'" (p. 3). He also made the point that investigating 'being' has a relationship to the being who is investigating it and therefore the researcher needed to recognise the position they hold in the shared intersubjective world. It was therefore important for me, as the researcher, to be reflexive about my own particular set of postulates

that I brought to this study. This was an important aspect of my data generation through the use of semi-structured interviews and in subsequent readings and interpretations of the text.

Phenomenological philosophy has provided qualitative research methods, and in particular IPA, with an understanding of how to examine the 'lived experience', which is the key aspect of the research question. Its aim is to describe and analyse everyday experiences of what it is like to be human. Husserl, the principal founder of phenomenological philosophy, stated that one becomes conscious of subjective experiences by reflecting on them (Husserl, 1927), however further developments in these ideas provide us with a much more embedded experience than this.

It was Heidegger (1962) who first developed this thinking further by suggesting that it is not possible to describe the lived experiences without paying attention to the fact that the researcher is also a 'being in the world' and is therefore also embedded rather than separated from the world. Merleau-Ponty (1962) replaced this concept of 'being in the world' to include the body. The body and the world are within each other and therefore our body is the means by which we communicate with the world, and which "shapes the fundamental character of our knowing about the world" (Smith et al., 2009, p. 19). As Johnson (2006) put it: "You have meaning or are caught up in meaning before you actually experience meaning reflectively" (p. 21).

Phenomenology, in relation to research therefore, is the study of phenomena and the nature and the meanings individuals give to the phenomena. The aim is to provide a rich description of the lived experience by engaging participants in such a way that aids the process of bringing to mind the lived experience of a particular topic or event, that up to that point may not have been reflected upon (Finlay, 2009). For the participants in this research, it may have been the first time they had the opportunity to reflect on what had been an experience they had taken for granted (e.g. having diabetes) or one so new that it had yet to be reflected upon (e.g. mindfulness). This attitude known as 'phenomenological reduction' is a conscious activity whereby the source of the phenomena in its pre-reflective state is returned to over and over in order to examine the lived experience (Thompson & Zahavi, 2007).

The way in which experience is communicated to others is through discourse, and, as Heidegger (1962) said, because humans are embedded in the world, we can only understand our being in the world through language. The way in which discourse is expressed is through language and we are not separate from this. Of course, the assumption (and criticism) here within IPA is that the participants are able to express their experiences adequately by using language (Willig, 2008). This idea of discourse being reflective of the lived experience is challenged by discursive psychologists (Langdridge, 2007). However, it seems that this aspect is part of the reflexive culture of phenomenological psychologists in recognising that language is both enabling and constraining, given that it is grounded in a historical and socio-cultural context (Smith et al., 2009). The assumption is that there is a connection between the talk and ones thinking and emotional and bodily state. IPA is concerned with this cognitive process but unlike quantitative approaches, it does not employ a predetermined hypothesis but rather focuses on a particular phenomenon within a particular context. In the case of the present study, it is the experience of relating to food for people with type 2 diabetes following an MBI (which is described in Section 2.6.4). Unlike discourse analysis, in which the researcher is interested in the role of language used, or thematic analysis, which is primarily a method of identifying, analysing and interpreting patterns of meanings, IPA is interested in how people ascribe meaning to their experience (Biggerstaff & Thompson, 2008).

It is important for the researcher to recognise that they too are a being-in-the-world subject to making interpretations in order to make sense of the world. They cannot therefore be objective. This brings in the need to take on the attitude of epoché (bracketing off prior assumptions and theories). For example, as I do not have diabetes, I may be placed as coming from a different socio-cultural context, plus the fact that I have read a number of theoretical papers on, for example, how mindfulness may work. However, one of the key aspects of the research is food and I too have my own relationship to food. Bringing this to my awareness was a continuous process but far from being an attempt to be objective, the act of bracketing is one of being reflexive (Finlay & Gough, 2008). Therefore, the acknowledgment of the role

of these influences, including that of the researcher, is important which brings in another key theory underpinning IPA, hermeneutics: the theory of interpretation.

The understanding of meaning of the data in IPA requires two strategies which Ricoeur (1970) described as 'empathic engagement' and 'critical engagement'. Although the first stage of interpretation may involve the hermeneutic of meaning recollection (empathic engagement), a critical realism epistemology demands a "suspicious interpretation" of the data produced by using critical questioning to make sense of participants' account of their experience and ascribe meaning to it (Langdridge, 2007; Willig, 2013). This leads to interpretations not only being descriptive via an empathic engagement but by use of critical engagement. One can question the data in ways that the participants may not be able to do so, but always remembering to keep it grounded in the text (Eatough & Smith, 2008). "Without the hermeneutics the phenomenon would not be seen" (Smith et al., 2009, p. 37).

The experience, or 'life-world', of the participants in this research is revealed by careful use of semi-structured interviews and by keeping in mind that this reveals a pre-reflective state, a taken-for-granted state that may not have been reflected upon previously. This 'life-world' (the pre-reflective state) is the perception we have of the objective world around us, the experience of ourselves in this world, and of our bodies and relationships, and takes place before we think or talk about it (Finlay, 2009). This term 'life-world' incorporates the idea that what is of interest to the phenomenologist is not so much on an inner world but on the lived experience in a social world, recognising that one only knows themselves by being in the world (Merleau-Ponty, 1962; Finlay, 2009).

Smith (2004) has pointed out that in IPA research, the researcher is trying to make sense of the participant making sense of their experience, and this is what he called a 'double hermeneutic'. Being reflexive as a researcher is essential for evaluating how preconceptions will influence the research and needs to be constantly checked as the analysis continued (Finlay, 2008). The 'hermeneutic circle' (Schmidt, 2006) refers to how the whole cannot be understood without an understanding of the parts, and that the parts cannot be understood without reference to the whole. As Gadamer (1989) has pointed out, how we see things is

constantly evolving in much the same way that “the present cannot be formed without the past” (p. 306).

The challenges of IPA for the researcher are in the understanding of the philosophical underpinnings and assumptions of this approach and recognising the impossible task of completely bracketing oneself off from the data (epoché). To bring interpretations would require the researcher to be clear about the role they play in not only the generation of data but also the influences they bring to bear on the interpretation. Therefore, the knowledge I held from the literature search I had conducted were subjected to the epoché, or rather reflexivity, otherwise the accuracy of the understanding of the lived experience could be compromised (Ashworth, 2015).

It is the focus on the individual and the meaning they give the phenomena that makes it idiographic. Idiography, unlike nomothetic research which focuses on aggregated data, aims for the in-depth focus of the particular (Smith, 2004) and in doing so, and in keeping with a critical realist epistemology, may help make sense of and build upon the nomothetic research (Smith et al., 2009). This to date has been inconclusive around the mechanisms of change for people with chronic health after mindfulness interventions. In Giorgi’s (1985) descriptive phenomenology the idiographic details are generalised to provide an essence of a phenomena (Finlay, 2009) but in IPA the use of hermeneutics for interpretative analysis links it to the literature with the voice of the participants being maintained. There is a need to go from the part to whole and back again to keep the individual in mind. This aspect alone is a key reason for using IPA for this research question so that the voice of the individual in an otherwise confusing literature on this topic can be heard. It was hoped that in using this methodology, the whole experience could produce a rich and textured description of how people living with diabetes experienced their relationship with food after an MBI and attempt to ascribe meaning to this experience.

In conclusion, the research question does not seek to determine the effects of diabetes or mindfulness on a relationship with food or assume a causal relationship. IPA seeks to describe and interpret the experiences that a particular person in a particular context has. In

this study the particular person and context is having diabetes and having been on an MBI. IPA describes and interprets what the participants bring to mind about their relatedness to the phenomena at hand, that is the relationship they have with food and the sense they made of it at the time of the interview (Giorgi, 1995). IPA does not seek to explain this experience. IPA is aligned to the concept of embodied cognitions that refers to how the mind should be understood in relation to the physical body and its interactions with the world (Wilson, 2002). This assumes that it is the body that "is a significant factor in how humans perceive, comprehend and act in the world" (Spackman et al., 2014, p. 47). In relation to the research question, this approach allows for the lived experience to take the foreground prior to any intellectual analysis (Smith et al., 2009). It was felt therefore that this was an appropriate methodology for research seeking to understand the lived experience of having a body that potentially shapes the relationship the participants have with food.

2.6 Research design

2.6.1 Data collection

The mainstay of data collection for an IPA study is via semi-structured interviews (Appendix A). This allows for a flexible data collection whereby the initial questions can be modified depending on the responses given by the participant, and the researcher can also probe any interesting areas that arise that may not have been considered initially. This required me to learn the questions in order to allow rapport to be more easily built and allow a reasonable level of flow in the discourse. Although this gave the participant ample opportunity to tell their story, the reason for setting some questions was that it was important to think about what might be covered in order to give some consideration of any possible sensitive areas that might come up and what needs to be in place to deal with this eventuality.

2.6.2 Participant recruitment

Participants were sought from graduates of a mindfulness course which was run from a diabetes clinic in a London hospital as a purposive sample. This was achieved by liaising with

the programme leader with whom the researcher had already established close links. Permission was requested from the clinical lead of the service as a peer review process and information was provided about the research proposal (Appendix B). The researcher also met with the course provider and shared with them an outline of the research and the recruitment advert. Any changes needed from discussions with the course provider were made to the information sheet, recruitment letter and advert (Appendices C and D). The patients who had been on the mindfulness course were sent the recruitment letter by the administrators in the clinic to ensure I was not in possession of any data about the participants than was absolutely necessary prior to engagement. In total, eight participants were recruited, and Table 1 gives a brief outline of the demographics of those interviewed.

Table 1. Brief overview of basic demographics of participants (*N* = 8)

Demographics	Reported
Age (years)	Range: 46-73 (Mean: 63.6)
Ethnicity	37.5% White British 37.5% Caribbean 25.0% British Asian
Years since diabetes diagnosis (years)	Range: 5-23 (Mean: 14)
Employment status	75% retired
Household	87.5% lived alone
Relatives with diabetes	100%
Management of diabetes	100% medication 50% diet
Years since MBCT course (years)	Range: 1-8 (Mean: 4)

2.6.3 Sampling considerations

Given the need to be able to conduct the research within an ethically approved site, it was prudent to seek peer review from the hospital diabetes consultant prior to seeking NHS ethics approval. The ethnicity of participants was a consideration as the literature points to an overrepresentation of the Asian population with diabetes in the UK. However, if English was not the language spoken by the participants it would have been beyond the capability of the researcher to use an interpreter and transcribe an interview in a meaningful and accurate way, therefore patients without English as a first language had to be excluded. It should be noted that this exclusion had already been put in place as a condition to attend the mindfulness course at the clinic.

The exclusion of patients with type 1 diabetes may have resulted in fewer young adults being able to participate. The difference between them is important with regards to the role of food and diet: T1D is an auto-immune disease which means the immune system is attacking the insulin-producing cells in the pancreas thus making those with T1D insulin dependent and is not associated with excess body weight; T2D is characterised by the body losing its ability to respond to insulin thus making them insulin resistant. This condition is associated with being overweight and an increased waist circumference and, unlike T1D which is often diagnosed in childhood, T2D is usually diagnosed in those over 30 years of age and these make up 90% of the cases (Diabetes UK, 2017).

This was also acknowledged in conversation with my supervisor that although food was an issue for both type 1 and type 2 patients once diagnosed, it was with type 2 patients that food would have played a major role in the development of diabetes unlike with type 1.

2.6.4 Description of MBI course attended

All of the participants attended the same mindfulness course but at different times. The course had been provided since 2006 in a diabetes clinic at an inner London hospital. The facilitator was a clinical psychologist who, at the time the course was first provided in 2006, had been a Buddhist meditator for eleven years. She had also been training as a meditation instructor for

three years and as a spiritual care facilitator, training carers, professionals and people living with illness to use meditation and compassion practices, for four years. She had taken part in mindfulness-based cognitive therapy (MBCT) staff training at South London & Maudsley NHS Trust, and had helped research into the benefits of mindfulness with mental health professionals. Supervision was provided via a colleague who had completed the MBCT training at Bangor University and she was training as a meditation instructor.

The screening of participants was done by way of initial telephone contact and the completion of questionnaires including the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD PHQ; Spitzer, Kroenke & Williams, 1999). This was to alert the facilitator to any symptoms of anxiety, depression, eating disorders, somatoform disorders, alcohol misuse and the use of any psychotropic medication. This was followed up by a clinical interview with the facilitator to ensure the exclusion criteria had been met.

The exclusion criteria for attendance on the course was:

1. Being under 18 years of age or having a learning disability.
2. People at risk of developing psychosis or currently experiencing psychotic phenomena. This was seen as important as the prevalence of psychosis is higher in people with diabetes than general population (Mukherjee et al., 1996) and the literature suggests that meditation can be a precipitating factor for psychosis (e.g. Sethi & Bhargava, 2003).
3. People currently experiencing PTSD, especially flashback phenomenon. This was informed by the literature at the time which suggested that although it was unknown whether MBIs could exacerbate symptoms of PTSD, there were reports of repressed memories and conflicts surfacing during meditation (e.g. Walsh & Roche, 1979).

The protocol of the course was the standard MBCT course (Teasdale, Segal & Williams, 2003) but with a number of important differences given that it was designed with people with diabetes (PWD) in mind. These differences were implemented following feedback from a pilot of the programme for PWD:

- No stipulation to do any formal practice other than the suggestion to do 'something mindfully' every day.
- A loving kindness meditation was included to facilitate the development of self-kindness and self-compassion.
- There was little emphasis on teaching 'thought catching' and other CBT skills.

(Frearson, 2006).

The facilitator is not currently registered with the UK Network for Mindfulness-Based Teacher Training Organisations (2012) which produced Good Practice Guidelines in 2015. This listing has been developed to provide a register for teachers of mindfulness courses to demonstrate that they meet the good practice guidance which essentially means that they are 'suitably trained, committed to continuous professional development, hold appropriate insurance and are receiving supervision for their teaching'(UK Network for Mindfulness-Based Teacher Training Organisations, 2012).

2.6.5 Interview process

A digital encrypted audio recorder with software was used to record the participants with their signed consent (Appendix E). The IPA methodology engaged the participants in recounting their lived experience and as such required the researcher to use a semi-structured interview schedule. These questions were a reflection of the topic of interest, that is, the experience of their relationship with food following a course in mindfulness rather than being informed from existing literature. This allowed for a broad and exploratory interview by remaining open to what is not known rather than what is known (Appendix A).

The participants were interviewed in a room at the diabetes clinic which was a familiar location to them. The interviews were conducted at a time when the clinical psychologist who runs the course was in the clinic in case issues arose that required her attention. Participants were given hard copies of the information sheet to look over and a consent form to read and sign. They were also asked if they had any questions about the information they had received.

The recording equipment was explained and that the interviews would be kept for a set period of five years before being erased.

2.6.6 Limitations

A number of limitations need to be addressed. Firstly, with regards to recruitment, although all of the participants did the same mindfulness course with the same teacher, they attended at different times ranging between one and eight years ago. Due to this range there may have been an effect on the data given the lack of research into the long term effects of mindfulness training and sustaining practice. Longitudinal studies investigating the durability of the impact of mindfulness courses beyond a year are scarce. Two studies have looked at the durability of facets of mindfulness and their positive effects after two years (Petrocchi & Ottaviani, 2016) and six years (de Vibe, Solhaug, Rosenvinge et al., 2018). De Vibe et al. (2018) found that following a course in Mindfulness Based Stress Reduction (MBSR) course with medical and psychology students in Norway, there was a sustained effect on the coping skills and dispositional mindfulness after six years compared to a control group, despite poor to moderate adherence to formal mindfulness practice. Secondly, there is the potential impact of diabetes on the cognitive abilities of the participants. Although there are studies on the benefits of MBIs on the ageing brain (e.g. Gard, Holzel & Lazar, 2014; Pagnoni & Cekic, 2007; Cotier, Zhang & Lee, 2017) there are far more studies on the association of cognitive decline in people with diabetes but usually in conjunction with further complications brought about by poor management of diabetes (e.g. Ding, Strachen, Reynolds et al., 2010). The effect of impaired executive cognitive functioning on health behaviours has also been studied, suggesting that a decline in cognitive functioning adversely effects health behaviours such as adhering to regimens for self-managing diabetes, which in turn leads to even greater cognitive decline as noted above (Tran, Baxter, Hamman & Grigsby, 2014). Mindfulness practice could be seen as a health behaviour and thus prone to similar effects.

One further limitation was on the general demographics of the participants. Current analysis of the patients in other similar services, such as where the researcher worked, showed

the patients to be mainly from the 50+ year-old age bracket. The younger participants tend to be mainly type 1 diabetes and they make up only 10% of the diabetes population in the UK. There was also the possibility that females would be more attracted to the MBIs than males so it was thought that this may make recruitment of males difficult. The ratio of males to females with diabetes is 1:1.

Time restrictions meant that the possibility of using more than one service to recruit potential participants was implausible. The protracted process of seeking ethical approval for the use of an NHS site increased the time restriction on the research process by almost a year. This process involved firstly gaining City University of London's ethical approval (Appendix I) and then I was able to seek approval from the HRA (Appendix J) and the Research Ethics Committee (REC: Appendix K). Once this was in place, I could apply to the NHS trust for approval and receive their confirmation of capacity and capability for the study to take place (Appendix L). This approval was only granted after I had completed the trust's good clinical practice course online (Appendix M). However, given that the methodology used in this research meant that it is interpretative in nature rather than generalisable to a population as a whole, meant that it gives voice to the individual rather than a group, and it was felt that the homogeneity of the participants could therefore be maintained by using only one site.

2.7 Analytical procedure

The first stage of the analysis process involved a verbatim transcription of the interviews. This involved listening to the recordings at length and in detail to ensure getting the transcriptions correct. The transcripts were printed off in landscape format with wide margins and with each line numbered in order to reference any quotes from the interview.

The central tenet in the analysis of the transcripts is meaning. This requires the researcher to engage with the transcripts and enter a process of interpretation. A double hermeneutic approach occurs when the participant is trying to make sense of their experience and the researcher is attempting to make sense of the participants 'sense making' (Smith & Osborn, 2003).

As a novice IPA researcher, I took guidance from Smith, Flowers and Larkin's (2009) step-by-step guide on the analysis process. This is by no means a prescriptive process but a useful one.

The first step was to concentrate on the first transcript before moving on to the others. This idiographic approach was followed allowing for a gradual generalisation of any claims. The first transcript was read a number of times, allowing for an immersion in the data. I found listening to the recording whilst reading the transcript the first time helped me to remember their voice to start off with. If some thoughts arose about the data, I wrote them in a notebook in an attempt to maintain a 'bracketing' off of any preconceptions I might have been making. This note-taking was something I could go back to later on in the analysis process but I tried to keep it aside to allow me to be with the participants and be able to describe at the next step what it was like for them.

Step two involved re-reading the transcript, with the right-hand margin being used to annotate what was interesting or important in what the participant said as a first-level analysis using description. This may have included getting a sense of the person or the use of language. I did not go back to the recordings at this stage as I felt that this would detract from describing the content and language. If I had listened to the recording, I would be bringing to mind the personal experience of being with them at that time rather than exploring what they actually said. The comments were as detailed as I could get without straying too far from how the participant was trying to make sense. I tried to get an idea of what the experience was like for the participants as they spoke about their relationships with food. I made notes on the three discrete processes that Smith et al. (2009) suggested which were descriptive, linguistic and conceptual, using a different coloured pen to distinguish each process from the others. I found myself using various strategies during this process such as reading it backwards in an attempt to not get lost in a felt sense of what was being said which would have been from my own 'being in the world'.

Step three involved reading the notes in the margin and checking it retained what the participant actually said. The task this time was to identify emerging themes in the transcripts

noting them in the left-hand margin. These themes were key words that captured the essential meaning of some passages and the notes I had made. This process involved preliminary interpretations, perhaps with theoretical connections, but always maintained grounding in the words of the participant in order to avoid research bias (see Appendix F for sample of step two and three coding).

For step four, the emerging themes were typed up in chronological order for each of the transcripts. I then printed them off and read them through to see if I could cluster them into related themes. I then retyped the list as clusters giving each cluster a superordinate theme. This process is referred to as "subsumption" by Smith et al. (2009), as I took an emergent theme and made it a superordinate theme. Again, these were checked in the transcript to ensure it was backed up by what was said. This was then put aside before starting on the next transcript.

Step five is moving to the next transcript and keeping in mind that new themes sometimes emerge in the next interviews. It was important to bracket off any ideas about the pervious transcript before moving on and keep oneself open to new themes that may emerge.

Step six involved looking for patterns across all of the cases and drawing up a table of master themes for the whole group (Appendix H for table of master themes). To do this, the superordinate themes had been written on post-it notes with a different colour for each participant. These were then stuck on my study wall and studied and moved around into meaningful clusters (Appendix G for a photo of part of this process). This process was repeated many times as I attempted to get a feel for what the essence of the experiences was that could be meaningfully captured by a number of master themes. This process eventually led to the master themes, as highlighted in the analysis chapter. These included two opposing superordinate themes due to the growing sense as I studied the data that there were tensions within and across the superordinate themes captured. This helped to make sense of the data in a meaningful way. When writing up the results the themes were then expanded as a narrative account making sure that it is clear which parts were what the participant actually said and which parts was the researcher's interpretation (Smith & Osborn, 2003).

At the analysis stage, the aims are twofold. Firstly, it is an attempt to describe the experiences of a specific relationship but keeping in mind that this is a co-constructed process between participant and researcher. Therefore, the initial stage is to produce "a coherent, third-person, and psychologically informed description which tried to get as 'close' to the participant's view as is possible" (Larkin, Watts & Clifton, 2006, p. 104). Secondly, it is to position this description in the wider literature, and in doing so provide a commentary on how the participants are making sense by using critical and conceptual interpretations (Smith & Osborn, 2003). This was achieved in the discussion chapter.

2.8 Validity and quality

Yardley's (2000) paper on ensuring validity in qualitative research is the main text used to consider the validity of this current research study. The criteria that is held to be one way of checking validity is outlined here along with my response in how this research meets the criteria.

2.8.1 Sensitivity to context

This involves the sensitivity of the social context, the nature of my involvement, the balance of power and how I may have influenced the participants' actions. The social context was considered in terms of where I met the participants for the interviews, which was somewhere familiar to them and where I was seen as an incomer. The diabetes clinic was chosen as it was also where the psychologist who ran the mindfulness course was based. My engagement with the data also required a sensitivity to context and this was achieved by a prolonged immersion with the data in the analysis stage as outlined in this chapter. I also considered the potential influence I may have had on the co-production of data including the balance of power issues and on the interpretation of the data in my reflexive piece.

2.8.2 Completeness of data collection, analysis and interpretation

This refers to the sampling considerations and whether the sample size was adequate to address the research question. It also refers to whether transparency in the methods used and the analysis were discussed. This also requires a sense of coherence across the whole approach from research question to analysis. There are no prescriptive notions of how large a sample size needs to be in IPA (Smith et al., 2009). The sample size of six to eight people from a distinct population of people was however in keeping with suggestions that this is adequate for the purposes of a Doctorate in Psychology thesis (Turpin, Barley, Beail, et al., 1997). The discussion in this chapter on the choices made for using IPA, including step-by-step details of how the data was coded and analysed, is included. The analysis chapter presents a number of excerpts from the data generated for the readers to discern for themselves the themes identified. It is hoped that the way this chapter is set out lends itself to a narrative that flows logically from the research question through to the analysis.

2.8.3 Reflexivity

A reflective piece is included at the end or within each of the chapters for the purposes of transparency on personal interests and motivations in relation to the research topic.

2.8.4 Is the research important?

The contribution that this research is hoping to make is mainly on the clinical practice involving counselling psychologists who are involved in the care of people with diabetes. The considerations of the use of mindfulness as an intervention with this group of people as well as other population groups may be informed by this research as we understand participants' experience of such interventions more ideographically.

2.9 Ethical considerations

This research was guided by the BPS *Code of Human Research Ethics* (2014). These guidelines are presented as a set of principles which are considered here:

2.9.1 Respect for the autonomy, privacy and dignity of individuals and communities

This requires that an informative sheet is provided to the potential participants so that they are clear about what it is they are being asked to contribute to. The participants were also told about how their data will be stored and the time limits on having their data withdrawn from the study. They were also made aware of the possible impact that this study may have and where assistance can be obtained. They were informed that their data will be confidential and anonymous but would be traceable by the researcher should they wish to withdraw their data within the prescribed time limit. These were addressed in the information sheet, recruitment letter and advert and consent form for participants in Appendices C, D and E.

2.9.2 Scientific integrity

This requires that the research is of sufficient high quality and that there is an awareness of potential risks and how these will be addressed. It was clear on the information sheets that the researcher was a student at City University of London, and there were details of how to complain or raise issues with the university with email addresses and phone numbers and a named person to contact. They were informed of services that were available to them should difficulties have arisen as a result of taking part in the research. These details were included on the sheets given to the participants in Appendix C.

2.9.3 Social Responsibility

There may have been some unexpected consequences of this work and so it was important to work closely with the supervisor, and to be self-reflective throughout the process by keeping a journal.

2.9.4 Maximising benefit and minimising harm

It was not expected that the participants would be exposed to harm that is greater than is encountered in everyday life. The researcher was aware of the power difference between the

participant and researcher and was sensitive to this. If any distress was caused unwittingly they were encouraged to use the services available to them in the diabetes service (Appendix C).

Ethical approval was sought and given by City University of London and by the NHS HRA and REC ethics board (Appendices I, J and K). Permission was also sought and given by the providers of the mindfulness course at the trust from which the participants were recruited via a peer review by the consultant in diabetes (Appendix B).

2.10 Reflexivity

2.10.1 Methodological reflexivity

I had had no previous experience prior to the Doctorate course in qualitative methodologies and was curious about what it could tell us about any particular research question. I had experience with quantitative methodologies and the attempt to be 'certain' about outcomes and backing this up with evidence. However, when I began to think more deeply about the epistemological and ontological concerns I realised that I had taken a positivist stance without question. I began to question this world-view and how it positioned me with not just what I thought I knew but also how this translated in how I had been with clients. I did not find the philosophical discussions around phenomenology easy and found myself having to go over it many times to really appreciate the essence of this particular stance. The more I read, the more I realised that it made sense to be able to engage in research that helped develop a perspective on a particular area of concern that came from the participants themselves. I also appreciated that I had an influence on the data collection process and the interpretations made as it was not possible to be a disembodied mind operating independently from the environment (Spackman et al., 2014). I soon realised that this was not as easy as I had at first assumed and struggled at every stage from the development of my research question to the discussion of the analysis.

The particular methodology I used is informed by the epistemology, or the way in which things can be known, which in light of the question being asked I have assumed that we can know the world by how we experience it. This critical realist epistemological stance subscribes to the view that there is an independent real world but that our understanding of this world is constructed by our perceptions and beliefs (Maxwell, 2012). However, this view is subject to revision as I continue to develop my understanding of the philosophy of phenomenology and grapple with the question "How do I know that there is an independent real world?" I do subscribe to the relativist ontological stance, which influences the critical realist epistemology, suggesting that the way the world is, is determined by how a person experiences a given phenomenon and that there may be different interpretations of the same event (Willig, 2015). This ontology seemed key to underpinning the methodological choice of using IPA as it was a good fit with an area of interest which thus far has produced a variety of conclusions.

2.10.2 Personal reflexivity

Being aware of the potential influence of my "being" on this research is important. It occurred to me that I have a dual relationship with diabetes: as a professional and as a daughter of a woman who has diabetes. I am aware that my mother seems to have great difficulties in her self-care despite all the constant trips to see the GP. She is an intelligent woman and is usually very active, and yet she nor I cannot work out what is making her self-care so difficult, in particular the way she relates to food and what it means to her. It struck me when I was putting this research together that I have never sat down with her to listen to what her experience is like. The reason for this is that I think I would find it hard to bracket off being her daughter and would want to rescue her by giving well-meant advice, even though I know she will ignore it. Then I realised just how much she ignores medical advice and that she is always using herself as the expert not others. This inevitably leads to frustration for both parties and potentially to harm. My mother can barely walk sometimes due to her inability to control her diabetes. It was only when I helped run a mindfulness course recently for people with diabetes I was struck by the very real sense of change in the participants, in how they were in the room and how

they spoke about themselves and their lives with diabetes. This felt sense of change was not, however, upheld by the various measures that we had given out prior to the course starting and finishing, i.e. PHQ9, GAD7 and PAID. Nothing had changed and in fact for some, it seemed to have gotten worse. I found myself confused by these results given what I had heard from these participants. At first, I had assumed that this meant the course was ineffective but I knew that this conclusion did not reflect my observation, so I decided that I would like to find out what is going on. I needed to find a way of capturing this difference that otherwise may be lost. I do not have diabetes and this has often been pointed out by my mother to keep me from giving further advice. I do not understand what it is like to live with diabetes and all too often I have defended myself from this position by assuming that she does not understand what it is like to live with diabetes. Therefore, this study is to meet that lack of knowledge head on and to step back and to exercise the Heideggerian *Da-sein* (being there).

Another aspect of this need to bracket off prior knowledge includes my personal experience and relationship with food. I have to eat and as such, have personal meanings in place about food which fluctuates according to current thinking and research on what is good or bad for you. I am very conscious of the media's portrayal of people with diabetes and those who are obese or overweight. The quote at the beginning of the literature review highlights a view of people who have diabetes as potentially bringing the NHS to bankruptcy. I share the world in which such headlines are apparent to the participants. I also share the confusing messages of what we should be eating even if I do not share the meaning they make of such information from the perspective of having diabetes. I too have attempted to change my diet at various times in my life. I also struggle with temptations and cravings at times for particular foodstuffs. I live in the same democracy and in the same part of London as the participants and I'm subject to the variety of foods available at all times of the day and night. What I am not subject to is having diabetes and the experience of what that means either medically, socially, politically or psychologically. The experience of this context of being in the world informs the meaning making of food and one's relationship with it. I am not immune to this and this was by far the hardest part of bracketing for me in this research. What helped me to

bracket my experiences was to engage in the practice of mindfulness and to try to be present with the participants in the here and now when we met for the interviews.

I have been engaged in mindfulness practice for the past 18 months and my biggest learning in that process has been to not rescue people but to let them be. It is presumptuous of me to think I can rescue others and this realisation has helped me become a more compassionate therapist in my own practice. When it comes to diabetes, it is generally expected that they are able to look after themselves relatively quickly. They sit between two worlds, one of being expected to be self-managing and then also to be passive recipients of help when offered. The role I had with the participants as I experienced it was ostensibly as a hands-off professional. I was aware of the limited space in the office I used and moving our seats away from the desk was my attempt to bring a sense of parity. However, the very presence of my papers, consent forms and recording device, plus the fact that they had to ask for me at reception and then wait for me, placed me in a particular power dynamic that was hard to avoid. In response to this experience, I was conscious of engaging mindfully and respectfully and with genuine curiosity with each of the participants.

I kept a journal to reflect on my research and as a way of being able to bracket off my assumptions and analyses, and maybe the temptation to listen out for echoes of my mother's experience, and my own. My academic background in developmental psychology and health psychology was also an influence I had to be aware of during the collection of data at the interview stage and in the first stages of analysis. The interpretation stage invited me in as the researcher to help interpret it using my understanding which was influenced by my prior knowledge. My non-diabetes status and role in the collection of co-produced data had to be kept in mind as a possible influence on how I saw the analysis.

CHAPTER 3: Analysis

3.1 Overview

This chapter aims to describe the master themes derived from the richness of the data collected. This is my interpretation of the way the participants have made sense of their lived experiences and by utilising interpretative phenomenological analysis which resulted in arranging and rearranging the data until I began to make some sense of how the participants may have been interpreting their experiences. What I drew out of this research was something that could be held together under one overall experience that was imbued in all of the data: 'Chaos: The embodiment of conflict'.

This tension is held throughout the data, giving way at times to chasing childhood memories or raging against the attempts to control and instil some discipline on themselves, or giving into pure indulgence of a passion for food in an almost fetish-like way. I have attempted to reflect these themes in the diagram in Figure 1.

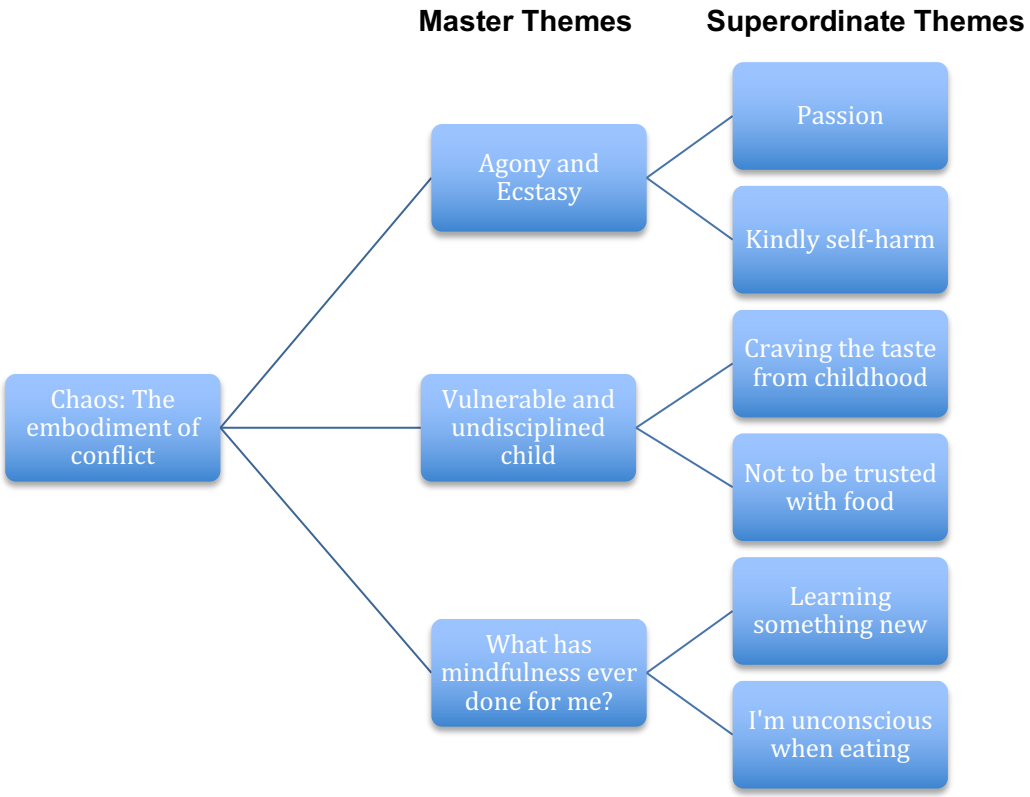

Figure 1. Illustrating the master themes with their superordinate themes being pulled together with the overarching theme of 'chaos'.

What seemed to emerge from the data is that chaos reigned in most of, if not all of, the participants' relationships to food long before the mindfulness course and even before being diagnosed with diabetes. What this research aimed to convey is how the participants, all of whom had type 2 diabetes, experienced their relationship with food following a mindfulness course. The historical perspective of the relationship with food in the data helped to position the relationship prior to diabetes and mindfulness, which had, for many of them, only served to add the experience of confusion to an already chaotic relationship. Each participant seemed to have experienced a 'push – pull' type of relationship with food which was expressed as a degree of '*Agony and Ecstasy'* in the relationship which was often secretive and hidden from others. This '*passion*' and '*kindly self-harm'* with food had overtones of being fetish-like in nature with consequences that made some participants experience feeling like criminals and debased as they experienced the agony of their 'passionate affairs'.

This leads into the other master theme of '*Vulnerable or Undisciplined child'* where the childlike qualities of participants' relationship with food is described. The experience of continuing to seek and crave the taste from their childhoods (*'Craving the taste from childhood')* whilst not feeling they could operate the discipline of a mindful approach after the course finished or even be trusted with food (*'Not to be trusted with food')* conjured up the sense of some of the participants as '*Vulnerable and Undisciplined Children'.*

The introduction of mindfulness to these participants seemed to again have been experienced with some ambivalence. The third and master theme '*What has mindfulness ever done for me?'* reflects on the experiences of the participants inasmuch that although attending the course was described by most of the participants as enjoyable, the effect it had on some of their relationships with food was described as being limited to experiencing a heightening of

awareness of what they were doing. This heightening of awareness for some was described as an increase in their experience of pain and shame with themselves rather than leading to any beneficial changes. This was reflected on by the participants with an appreciation for mindfulness in the superordinate theme '*Learning something new'* but in their actual relationship to food, thinking was experienced as painful for some which made the eating of food an easier solution to dealing with difficult thoughts. Some participants described how being an 'unconscious' eater was preferable than the battle with their thoughts as highlighted in the '*I'm unconscious when eating'* theme.

3.1.1 Summary

Chaos did not seem to retreat when diabetes and mindfulness came along, it held all of the experiences even more tightly together as some participants became more aware of what they were doing. For some, this was described as resulting in pain and anger and 'sticking two fingers up' at mindfulness. Others described a decline in caring, or to manage a shift in their focus to other matters in their life that meant learning to live in an unhappy or reluctant relationship with food.

Pseudonyms and the blanking out of any identifying data are used throughout the thesis to protect the identity of the participants. Where participants have used their own names in the quotes, I have placed their pseudonym in brackets instead e.g. [Cheryl] as this makes it easier to read.

Box 1 explains the legends used when making direct quotes from the participants. After each quote the first letter of the pseudonym used for the participant is followed by the page number, then the line number from the transcripts of the interview. For example, K:6:173-181 denotes that the quote is from Kevin's interview page 6, lines 173 to 181.

Box 1: Legend used in quotes
'...' indicates a pause
(...) indicates missing data

Box 1: Legend used in quotes

3.2 *Agony and Ecstasy*

The '*Agony and Ecstasy'* theme reflected the darker side of the participants' experiences and demonstrated the passion and the anger they felt with themselves and their relationship to food and how passion had a carnal and physical pleasure to it. It helped capture the fetish-like or illicit nature of their relationships with food. The two superordinate themes of '*passion'* and '*kindly self-harm'* is an attempt to separate the pleasures of food from the experience of harm or shame that was felt by many of the participants following pleasure.

3.2.1 Passion

The relationship with food for many of the participants came with a very physical relationship involving many of the senses and a seeking of sensations. Sandeep illustrated this when he said:

> *"…when I have been bingeing on food, it can be pretty awful (…) I have all sorts of rubbish (…) it's not doing me any good (…) I think that it's sort of the physical fact of, sensation (…) seeking a sensation." (S:10:266-284)*

Here, he was very aware of the 'rubbish' he was eating and he spoke about this idea of 'seeking a sensation' in a very deliberate and thoughtful way as he brought this experience to mind. The struggle in finding the words to articulate this experience was possibly part of the

reason for the eating as it may have been beyond words or unnecessary for words and explanation and more about the physical experience of sensation. What the sensation was exactly was left undefined apart from being one that was deliberately sought after. This brings to mind the idea of craving and the need for quick fixes which is something Barbara was familiar with.

> *"…sweets, sweet stuff. Mainly chocolate. Quick easy fix." (B:7:189)*

This 'quick easy fix' again involved the possible seeking of a sensation and therefore not something to be dwelt upon.

> *"…in the mouth, swallowed before you (…) before you even think about it." (B:7-8:191-193)*

This conveyed the idea that either thought might get in the way of the 'fix' or that there was just no time for thought.

This conflict between the agony and the ecstasy was something that all the participants described feeling at some point. Kevin spoke about the irresistible nature of food from a young age and then as an adult he had developed a particular passion for drugs and alcohol which he felt was later replaced by food:

> *"I had a bit of a pash for cocaine and alcohol and (…) I did find out that there was a direct segway from, er, what had been cocaine and alcohol to food. It was just like two wedges, you know, and I went (illustrates with hands)* (**Researcher:** The one stopped and the other started?) *Yeah, exactly." (K:4:105-114)*

This reflected the degree of 'ecstasy' he derived from food and how closely he related the way he used food to the use of illicit substances which were addictive in nature. This concept of addiction is continued with other participants. Aja spoke of the craving she experienced which was repeated over and over in the interview, often as a reason why she ate, what she ate or as an example of perhaps how helpless she is in denying herself what she craved:

"I just crave for that taste (…) Just that taste. I'll just want that taste." (A:3:64-78)

"I just want to taste that." (A:4:108-109)

"Just enjoy eating and I just enjoy eating. I can't help it." (A:6:137)

"I thought I have to have it. I couldn't help it. I couldn't resist it. I had to…" (A:7:174-175)

The repetition of Aja in describing the 'wanting' of a taste gave the impression of an almost desperate plea for understanding. It could also be interpreted as a cry for help as she repeated the word 'just' which had the effect of conveying a sense of helplessness. She went on to express some concerns about her addiction when she said:

"…the sugar feeling goes to my head. I'm addicted to the sugar (…) I'm finding it difficult to come off the sugary stuff." (A:12:279-288)

The description of craving and addiction was emphasised in the way she described the difficulty of 'coming off' her addiction, rather than say, 'not having it', or 'having less of it'. It is terminology one would apply to addictive behaviour such as drug use. She later went on to explain how she viewed sugar and to describe in some way her continued use of it:

*"…you know like when you have medicine… (**Researcher**: Ummm) …and you have that pain and it goes away. That's what it feels like. I feel it's like medicine pain really (…) feel relieved after the… when the… my hunger's been fed." (A24:571-577)*

Food is being directly likened to a drug, in this case a legitimate 'medicine', in order to treat a physical complaint, 'hunger'. The association between food and drugs is a strong one. Hunger is also perhaps perceived as being not normal, or a condition requiring a special kind of intervention.

The participants' passion for certain foodstuffs did not seem to be carefree or nonchalant, as the conflict between feeding a passion and the repercussions was often very painfully apparent to them. Jacinta typified this when she expressed how she goes looking for sweets at night with a sense of desperation:

"Sometimes I say to myself, no, I have a large packet of nuts and raisins also a variety of nuts and, um, I will try to use those instead, you know, try to leave the sweets and sometimes I can manage so well and sometimes, you know, sometimes 10 o'clock at night I say, I must go out and get some sweets…" (J:9:188-194)

As with Aja, there is that sense of desperation when she described the trying to 'use' something else, again conjuring the image of a drug addict 'using' substances as a type of substitute therapy. The difficulties she experiences is also continued when she uses the word 'leave' when talking about the sweets, which she does until it gets to a time when she cannot 'try to leave the sweets' and 'must go out' into the night to feed her cravings. Jacinta described a very pleasurable feeling from feeding these cravings which conjures up a physical pleasure derived from the sensation of taste:

"I think it's the taste (…) the taste of, I don't know. It gives you sort of comfort, you know, it makes you feel good." (J:19:456-459)

She explained later what she believed was the driving force of this desperate searching for something to help her. She described an experience which she and other participants felt was part of the relationship with food:

"I have this overwhelming feeling that I am not in a good place, I'm not happy and I want to be happy and it's just go and find any food (…) the fastest thing I can find, any unhealthy things (…) I just want that, those, you know, I just like I need it, this is going to keep me from screaming or being, doing something ridiculous. I just need… I'm so anxious, I just need…" (J:20:477-493)

The yearning feels very real, especially with the use of the present tense. It was as if she was experiencing these feelings right now. This idea of experiencing a force urging them to seek particular food stuffs was apparent with other participants too. Barbara talked of how she used food in a number of ways. She began by describing her relationship with food as:

"Filling up a gap. An emotional gap and a mental gap" (B:5:134)

This way of eating was seen by Barbara as something that she did not feel she had much control over either:

'I think when you've, like me, eaten, not necessarily because you are hungry, but because you were eating for stimulation or filling the gap left between the emotional problem and the, the lack of intellectual stimulus, you dull, almost switch off the mechanism in the brain that says 'you're full'." (B:13:354-358)

Here, she is expressing a dulling of her emotional and intellectual self through eating to fill a gap that perhaps should have been filled by other things, such as people or experiences. This 'switching off' as a phenomenon is explored further in the *What has mindfulness ever done for me?* section.

The lack of control over the quest for something was often experienced as providing a degree of pleasure which for Vea, like Sandeep who spoke earlier of seeking a sensation, was often difficult to put into words:

> *"…by having filling my stomach was oooh…" (V:6:138-139)*

Sandeep had a particular food that he found comforting and he tried to describe what it was about this foodstuff that he found so comforting:

> *"I'm comforted by jellies (…) I like jellies, um… but they're pretty you know (…) it's just, just a nice thing to eat. It's just a nice texture, and colour and taste. I suppose all foods have some kind of emotional content to them." (S:25-26:675-683)*

This searching for oral satisfaction is something that comes up again in the *Vulnerable & Undisciplined Child* theme, and for Jacinta this need to have a particular taste, as with Aja and Sandeep especially, is something that she described as having a direct effect on her mood:

> *"…sometimes when… no reason, no apparent reason, I want coffee and I would put two sugars, yeah just (…) it makes me feel when I have the taste, it makes me feel, you know, happy (…) when I drink coffee I can't sleep at night, but*

sometimes still I go for coffee (…) I feel it lifts me a bit, yeah, lifts me out of that, more I taste while I'm drinking it, you know, it makes me release, like a bit of endorphins, make me, lifts me a bit." (J:26-27:633-659)

It may be the effects of caffeine or the sugary taste that is 'lifting' her but she had also made the connection that *"my dad was a coffee person" (J:26:631-632)* and this was expressed just before she began to describe the emotional lift that she got from coffee even though she otherwise does not drink it. The idea of addiction was present in many of the participants' descriptions of their relationships with food; sometimes it was in the drive or the urge to eat a particular type of food as in the above descriptions. However, sometimes as with Kevin, it was conveyed in how he described his battle with particular foods.

"*…I don't want to sound too 12 step-ish, but it is a sort of Whack-A-Mole, er, addictive behaviour, where you manage to get your hands on to three of them, you know. Was it, what's the other analogy? You know, five, five pots four lids, you know, or, or, or, you know the Whack-A-Mole. You can manage to keep some of them down but they all keep popping up." (K:5:139-146)*

The use of the term '12 step-ish' immediately draws parallels with the Alcoholics Anonymous (AA)12-step treatment approach for treating alcoholics and adds to the continuing sense of the participants battling with cravings. Barbara noted the downside of these fixes.

"Of course it didn't work but even so (…) the habit of using it as a substitute was well engrained in me by then." (B:6:136-137)

This way of talking about the "habit" gave the sense of becoming hooked ("engrained") on these "substitutes".

This takes us into the next superordinate theme of '*kindly self-harm'* and the personal battles and fights that many of the participants experienced, how they struggled to make sense of their experiences, and how they explained it to themselves as well as to me.

3.2.2 Kindly self-harm

In this section, the participants described the opposing experience to passion which is self-harm and contributes to the tension between feeding the passion at the same time as holding knowledge of the harm it is doing to them. Sandeep described perhaps most vividly how he had understood his experience of cravings as *"almost criminal" (S:26:693)* giving it a darkness and depravity about it as he brought it to mind.

> *"I think because I've had quite a dysfunctional life, um, it needed to fill a gap (…) triggers something (…) a craving, a craving, really just craving (…) I will go to… the takeaway and eat this saturate food, er, and also… then I go on the search for sugar, so I compound the crime, as it were, and it feels like a crime." (S:5:103-119)*

Sandeep also described how he was disgusted with his cravings as he tried to describe his feelings and make sense of them in terms of perhaps a more acceptable way such as an eating disorder.

> *"I must say there are times when I'm disgusted by myself, in that my, my, my cravings can be, especially this meat craving, can be over, overwhelming (…) there's something almost criminal about it, um, there's a revulsion there (…) I can understand why people deal with bulimia and things like this and then having anorexia and having revulsions for food as well as delighting in it, um, because it's a powerful, it's a powerful thing that we, er, we need and, and yet, you know, it can, I mean I remember there was someone told me there was*

food that is hurtful, um, there's hate food, there's food that you eat because you are hating. That hates you, the body… and you." (S:26:683-702)

It is striking the way that the use of eating disorder terminology seems to mediate the disgust, criminality and revulsion of food with the idea of food "that hates you". It comes across like a reciprocal relationship and relating it to diagnosable eating disorders perhaps helps to make it more relatable. This idea of understanding the participants' experiences as being like an eating disorder was echoed by Kevin. He had a similar way of describing his relationship with food and the attitude he had towards it at times.

"I think for every overeater there's also, you know, the kind of anorexic mind-set as well, so, you know, I consider myself to be an, an unsuccessful anorexic rather than a successful overeater." (K:9:248-252)

This very much conveys a sense of failure in his relationship with food in the sense that success would have meant being able to resist it (have anorexia) rather than give in to it (become an overeater). It also acts as a way of moving Kevin away from just being someone who eats too much into the realm of not being able to fully control the mindset of rejecting food, which is possible what he sees the anorexic as doing. It conveys the idea of a desire to reject food but failing to do so. This is not dissimilar to how Aja talks about eating.

"*Like it's sort of like, I think, I don't know, you could call it binge eating, I don't know, but I feel like chewing (**Researcher:** Do you call it binge eating?) No (…) because I enjoy eating that's why." (A:6:146-151)*

Here Aja appears to want to introduce the idea of having an eating disorder (binge eating) but when it was given back to her to answer she seems to reject the concept because she enjoys eating. This could suggest that Aja understands eating disorders to be the domain

of those who do not enjoy eating. The concept of being in control or not was also present for many of the participants in how they experienced their relationship with food. The participants seemed to be experiencing a constant battle of trying to exert some form of control over the craving and addictions. As with Sandeep, the disgust with self or other such negative feelings were a big part of this seemingly vicious cycle for Kevin.

> *"I was in a constant state of battle, you know. I don't want to do that. I'm not going to do that. Oh, I'm doing that again! You know, you know, it was that constant state of battle, oh I don't want to do that. It was, it was like overeating is my problem and the only solution I've got is overeating. You know, and it was, you know, that's oh my god, overeating makes me feel so unhappy, but the only thing that makes me feel happy is overeating." (K:6:173-181)*

Many of the participants described the harm they were doing to themselves using vivid narratives evoking painful, shadowy nature of this side of their relationships with food.

> *"…there's definitely the shower scene in 'Psycho', but there not being another person there. You know, you're doing it to yourself (…) so you're stabbing yourself." (K:11:319-324)*

This suggests not only a very personal and solitary way of behaving but a frightening scenario that he is faced with on a regular basis. The reference to the film *Psycho* is an interesting reference to use as the main character carries out a horrific act because of guilt. In this example, Kevin blames himself for stabbing himself. In a similar way to Kevin, Sandeep is able to describe what happens to him and the dangerous nature of food.

> *"It's a poison that is delicious, you know, simply drawing me in, you know. You see it on the shelf in the supermarket. It's drawing me towards it and the*

flavours are, are, are triggering on my taste buds… but the bloatedness and the after effects are uncomfortable, um… and as I have diabetes, it, it, it is actually killing me, you know, it is doing something to my, my physicality that it shouldn't, you know (…) it's sort of cut, its self-harming (…) it's a form of kindly self-harming." (S:26-27:711-725)

The use of the present tense increases the tension and sense of danger he constantly feels. He experiences being drawn in by some invisible force and is able to experience the taste and the effect it will have on his body, but there is no sense that he is going to stop it from happening. He engages with the knowledge that it is doing something to him but, and perhaps with a sense of resentment, he also feels that this is something that "shouldn't" be happening to him. As some of the participants pointed out, this 'self-harm' was not done in ignorance but with a comprehensive knowledge of the facts of food and what it can do to them, both good and bad. Sandeep, as with other participants, described understanding what foodstuffs were good or bad for them.

"…because I've been around vegetarians and I've worked in health food stores (…) so I got to know things quite quickly, so I know what is good for me (…) my knowledge is, is pretty comprehensive. I, I do have a good understanding of it." (S:8-9:221-238)

Cheryl described herself is such a way that conveyed herself as either one who takes a particular interest in good food and drink, or someone who eats and drinks to excess:

"I'm a bit of a gourmand" (C:1:23)

In the case with Barbara that she felt she had done everything asked of her to improve her knowledge:

"everything that was offered in terms of understanding diabetes, diet, well-balanced eating, exercise, I did." (B:11-12:307-309)

This was the same for Kevin too who had described his unhealthy food choices as deliberate self-harm, and he attempted to explain that this was due to not applying what he actually knows about food.

"I think the stab in the heart is certainly, er, eating foods which, you know, if I applied a modicum of common sense, I would understand weren't necessarily good for me." (K:12:352-355)

These examples show how participants knew what food was good and bad for them. In looking for some evidence as to why this knowledge was not enough to change eating behaviours, Sandeep for example, described how his use of food was intrinsically linked to his thinking; in particular, how conscious he is of himself and in himself.

"I think it reflects the sort of pattern of thinking that I am in at that time (…) typically self-destructive (…) not happy with myself or with the world around me (…) so the way of dealing with that is to sort of do bad things to myself, not in the sense that, you know, go out and hurt somebody else or seriously hurt… well I am hurting myself but it's only, it's like small pain." (S:11:298-307)

Kevin also described just how conscious he was of what he was doing to himself:

"It was addictive behaviour, compulsive obsessive, you know, eating, um and quite conscious… quite consciously self-destructive in some ways. It was kind of like, it was a long slow suicide rather than a short fast one." (K:4:118-122)

The description of his relationship with food as being like a "long slow suicide" was a poignant one. He describes using food not only as a weapon, but using it as a means of ending the distress he felt seemingly in the absence of an alternative way of living. Sandeep articulated how he understood what made food and his relationship to it so dangerous:

> *"It's not so much the food itself, but it's the sort of attitude toward it, you know, like the attitude toward an éclair, a chocolate éclair I shouldn't be having because it will kill me (…) it's a poison that is delicious (…) it is actually killing me." (S: 26/27:705-716)*

Aja also described what she was doing to herself in a similar way, but she also identified how she could be in denial which went some way to maintain her current relationship with food:

> *"Like I know it's like a hidden killer. I'm aware of that. I know it can affect you neurologically (…) but for some rhyme or reason it's not affecting me." (A:13:295-298)*

The experience of believing that what she ate was not affecting her was apparent. On one hand she realised that sugar was a "hidden killer" but still experienced surprise ("some rhyme or reason") that if there was any effect it was unseen. The denial of any harm being done was preferable to the disapproval of self as Aja expressed.

> *"I'll just get on with it. I don't punish myself or anything." (A:8:192)*

Sandeep recognised and held the tension between the idea of feeding a craving and the harm it was doing to him:

*"…it's sort of cut, it's self-harming (…) it's self-harming (…) it's a form of kindly self-harming (**Researcher**: So, on one hand it's…) it's absolutely beautiful… and then on the other hand it's self-harming, you know. The two are gelled together." (S:27:720-730)*

What has come out of the participants' experiences is that the desperation for something like all cravings and addictions has only a short-lived effect. For Sandeep, the longer-term effect on how he saw himself was profound.

"I must say there are times when I am disgusted by myself (…) there's something very debasing (…) about doing stuff like that." (S:26:683-692)

Similarly, for Jacinta, she was painfully aware of the aftermath of giving in to the cravings.

"Yeah it works, it works sometimes, but sometimes the guilt. I know I shouldn't be doing this." (J:20:496-497)

Jacinta did not describe any physical repercussions, but she described feeling the guilt of knowing she had gone against the knowledge she had been taught. These descriptions in how the participants related to food was often referred to starting in their childhood and how this attitude to food had remained unchanged to a great extent.

The '*Vulnerable and Undisciplined Child'* is another master theme reflected throughout the interviews and across all participants as a source of conflict and attempts to meet needs that for some seemed unable to be met in other ways.

3.3 Vulnerable and Undisciplined Child

One of the most striking aspects of how the participants described their experiences with their relationships to food was how it reminded them of their childhood. The child-like aspect was heightened for a number of participants who described that they needed others to prepare the food or that they could not be trusted with food. These tensions are held across the two superordinate themes of '*Craving the taste of childhood'* followed by '*Not to be trusted with food'.*

3.3.1 Craving the taste of childhood

The craving of the taste of childhood was described by most of the participants as a conscious experience of taste, such as sweets or particular meals. Vea was able to articulate very clearly what her experience was like when it came to maintaining a relationship with her mother who had died when she was 13 years old.

> *"…so, to me, giving her back something in life, I was eating for two. Instead of having one glass of wine I'd have two glasses of wine, so I was eating for comfort, comfort, comfort eating" (V:2: 31- 35)*

The idea of "eating for two" initially brings to mind the image of a pregnant woman and yet for Vea she is carrying her mother not a child. She described it as an almost inaccessible pain of loss that was deep down in her "lower" stomach and this was therefore the place she had to 'feed' in order to keep her mother alive so that she could look after her and comfort her.

> *"I used to carry a lot of pain in my stomach, in my lower stomach, but ever anything happened in life I used to turn to food for comfort because my mother was never with me. I couldn't talk to my mother and I used to believe people used to pick on me because I haven't got a mother." (V:2:44-49)*

This voice of the 'vulnerable child' was apparent in other people's accounts too, and often in the context of loss. Kevin had been cared for by his grandmother and he was able to link the associations he had of food to the comfort this gave him.

> *"I think there is a comfort thing with food. I think, you know, that is the sort of, you know, that's the sort of, er, relationship with my grandmother and food and stuff like that when she was… that there, you know, is the care and love associations with food and therefore by feeding myself, I am loving and caring for myself…" (K:11:310-316)*

The association of childhood losses was a key theme. For some it was the loss of a parent or carer through death. However, for others, for example Sandeep, it was the association of the country they came from when talking about certain childhood foods:

> *"That's really comforting, especially on a dark climate like here." (S:8:200-201)*

In some cases, it was the loss of stimulation and affection from parents. Barbara expressed a relationship with food that was a chore, a thing to get done, and this was reflected in how she experienced meal times with her parents (the "couple") when she was a child.

> *"…you sat down at meals together, but there would often be tension. The tension of perhaps lack of communication or non-speaking between the couple, um, also I think some tensions inasmuch as it was a very enclosed, um family unit, which didn't have too much outside social contact." (B:2:37-42)*

Perhaps the rather distant sounding relationship Barbara had with her parents influenced her relationship with food. She talked about the needs she had which were not met

by “the couple” and how she had looked to food to give her all the things she did not have as a child.

> *“Filling up a gap. An emotional gap and a mental gap (…) and of course it didn’t work but even so, the, the, the habit of using it as a substitute was well engrained in me by then.” (B:5:134-136)*

Again, the idea of food as a habit and something to be ‘used’ permeates descriptions by Barbara and others. Barbara expanded on this in more detail as described food as a way of loving herself and being loved.

> *“There’s something in my mind from my childhood, food equals love. Food, plenty of it. Food, lifestyle equals a way of expressing love (…) if there is no, what shall I say, um, physical demonstration, verbal demonstration that you’re valued and loved, it, it becomes a way of saying that you are and I’d buy sweets every week, you know, I’d go and buy a box of chocolates when I’m out (…) because there was that lack of it, which I’ve had to work really hard to recover for myself.” (B:15:403-413)*

The sadness that permeated the experiences that the participants had in their relationship with food and the continued efforts to rekindle something or even to start a relationship that never had existed, as with Barbara, is part of what most of the participants described. They are heartfelt and have a desperation about them. Jacinta lost her mother just as she was becoming an adult.

> *“Just before I was twenty one, um, she died (…) it was like, I didn’t realise it was a coping mechanism (…) I just kept eating and going to bed (…) and I find*

it, you know, I don't know if that is what's happening and now I can't really get out of this depressive moods, you that, that's haunt me so much." (J:4:79-88)

Although I could sense the vulnerability in all the participants when we spoke, this was particularly noticeable for Jacinta.. Her use of 'haunt' captures a sense of being enveloped by these inescapable moods that she continues to experience.

Vea described how her experiences with food had made her realise just how much her relationship with food had potentially been about replicating her relationship with her mother.

"I used to turn to food for comfort because my mother was never with me." (V:2:45-47)
"I was living my life in my mother." (V:3:61)

She also described how that 'internal mother' which she carried in her stomach was

"*…because I had pain, I missed my mum so to me your mum was there." (V:4:112-113)*
"…by having filling my stomach was oooh that's where all my pain was and why I'm saying that to you, on reflection now the night my mother died, I was by her bed and (…) as she's dying I just held on to my stomach." (V:6:138-142).

Vea spoke as if someone else was speaking for her at times which was noticeable when she said "your mum" rather than 'my mum'.

Whether food was conceptualised as a coping mechanism borne out of some sort of grief or loss, it did seem to stem from participants' much earlier lives but kept alive in the present with food. Like others, Sandeep spoke about the type of foods he would crave in a way which implied that he had not moved on from being a child.

"…even now I, I , I go to the shop and buy Wagon Wheels, which is sort of a reminder of my childhood. The flavours haven't changed (…) it's a craving for a particular taste…" (S:2:47-51)

"*I'm still a child, I still go down to the sweet shop and buy… a savoury pie and a, a Lion Bar for lunch and eat that…" (S:18:485-487)*

3.3.2. Not to be trusted with food

This theme of not being trusted with food begins with Cheryl, as she said the way she deals with food was to not keep it indoors.

"I go into Waitrose… I don't keep food in the house. I use it as my larder. I call it the larder." (C:11:273-274)

Cheryl came over as very matter-of-fact about this idea of treating a nearby supermarket as her larder. The supermarket became an extension to her and of her home as if it was a possession to perhaps compensate for the lost one. The idea of not being trusted with food was continued as she often referred to her eating as 'naughty' which was reminiscent of quite a childlike way of talking about herself and one that conjures up the perception of an undisciplined child.

"I usually eat in front of the television, which is very naughty…" (C:13:337-338)

"…sometimes in the week if I'm feeling naughty er bacon and tomatoes…" (C:15:385-386)

"I was naughty this morning, I had another piece of toast…" (C:16:412-413)

"I was very naughty the day I came back, this is a very naughty week (…) very naughty when I came back." (C:17:437-439)

This way of talking to herself was also extended to a dietician who had given her some advice:

"…stopped me from eating taramasalata. She said very, very naughty, so that's a treat as well sometimes." (C:19:501-502)

There is something very childlike in the way she spoke about herself and to herself that was quite striking by virtue of the repetition of the word 'naughty'. But she also concerted if from being "naughty" to being a "treat", which may have been her attempting to be loving towards herself.

Sandeep's way of relating to food, as mentioned in the previous section, was possibly his attempt to stave off some really distressing thoughts he had about himself. This would often result in what can be interpreted as an undisciplined childlike way of eating.

"…so, grabbing whatever's available to me in the kitchen and, and stuffing it in my mouth and then going back to sleep." (S:13:344-346)

This conjures up the image of a baby being fed and then going back to sleep as if it has a soporific effect on him. This way of eating to calm oneself as if they were a child or even a baby is something that Aja seemed very prone to as she talked about 'wanting the taste' or feeling the need to 'just chew'. It created a visceral sense of oral satisfaction that comes through producing a sense of almost complete disregard for anything else or the consequences; an almost primal need.

"I keep wanting to, to have those taste, you know, that taste that what I had in my childhood, er, now I just crave for that taste." (A:3:62-64)
"Even if I'm not hungry I'll go and have it because… I just want to taste that." (A:4:107-109)

*"Just enjoy eating and I just enjoy eating. I can't help it (…) I don't feel anything but I feel I need to chew. I don't know why. I just need to chew (***Researcher***: Right) Like it's sort of like, I think, I don't know, you could call it binge eating, I don't know, but I feel like chewing." (A:6:137-147)*

The taste for Aja is more important than the hunger or anything else. This entering into a childlike or primal state had the effect of a relinquishment of taking responsibility of the consequences. Maybe what she is describing is that she just gave up trying and failing.

"That's what I've noticed with me that I have to have somebody or I have to go to a session." (A:18:434-435)
"I do sometimes feel I can't be bothered to (…) eat certain foods and not eat certain foods. Eat the certain set amount (…) because I am enjoying it so much, I want more of it and then I get full." (A:19:447-454)

Aja did wish she could help herself, but to do that was not about the lack of knowledge, as mentioned above, but the lack of will to make the changes necessary. This seems to require an attitude change which she just did not feel able to affect.

"…having sugar will affect my liver or my body or because I'm aware of all those things, I am, it's just, I don't know how to get myself round to taking it seriously (…) I don't think I'm taking it seriously because I can't… I don't know what to… how to… I don't know how to take it seriously…" (A:32:761-767)

It is as though 'taste' is the opposite of 'taking it seriously' which would make taste the same as misbehaving. his childlike vulnerability reverberates throughout the accounts. Kevin, for example, was fully aware of how his relationship with food was a re-enactment of his

childhood. He started by recounting how this relationship changed after his grandmother (his main carer) died.

> *"My grandmother did die when I was reasonably young, about 12, which you know, was quite devastating for me. Um, my mother was still working and I started looking after myself (…) I often cooked something for myself (…) pretty awful stuff (…) it was just sort of you know, whatever it was, cheese on toast or (…) I had a fondness for curries which of course meant the house stank of curry the whole time, although I never noticed, you know, just frying onions and putting curry powder in and bits and pieces." (K:2-3:46-68)*

Kevin's childlike way of looking after himself reversed in adulthood as the thing that is harming him. There was a sense of being oblivious of his surroundings ("I never noticed") and a slightly chaotic sounding way of feeding himself almost like he himself was in 'bits and pieces' and this is how he held himself together. This way of eating continued into adulthood

> *"Because, you know, the mindset, you know, it's like 'Well it's better not to eat', you know, and then when you do eat, 'Oh fuck it's all gone wrong, so I'll just eat'. You know what I mean? So it was like 'Oh I've broken it' so I'll press the 'Fuck it' button now and just go for it." (K:9:255-259)*

Vea seemed uncertain in her constant questioning style as she considered her relationship with food and wondered, for example, if it was also a way of keeping herself safe.

> *"I said to myself, did I kept her in me so that I do nothing bad in my life*?" (V:21:537-539).

This interview was a very reflective experience for Vea as possibly indicated by the use of questions which were to herself rather than to me. The idea of keeping her mother in her seemed to be understood by Vea as a way of keeping herself disciplined and therefore safe. Barbara, however, described how she does not find food satisfying and part of the reason for that is down to her experience of feeling a lack of confidence with food and a sense of therefore not to be trusted with food.

> *"I've not fully claimed and stand on my own ground as an individual (…) in terms of food, I'm not safe on my own ground." (B:26:709-716)*

The only way Barbara felt she could have a relationship with food was to

> *"…have someone lay the nice plate of acceptable, well-balanced food in front of me and I'd happily eat it, not too much, not overdo it, thank you." (B:18:484-486)*

The theme of child-like rebellion is probably best summed up by Kevin when he described what happens to him when he lets go of trying to be mindful with food.

> *"…when I'm in low moods, I tend to go, you know, I feel like a kid wandering around giving everything the V signals, you know, you know, you know, just 'fuck off, fuck off, fuck off' and… and that goes for mindfulness as well." (K:22:651-654)*

The child-like state that is entered, as described by many of the participants, affects every aspect of the relationship to food and this attitude overlapped to some extent with how mindfulness had or had not affected this relationship.

3.4 What has mindfulness ever done for me?

This particular master theme was chosen partly due to the research question referencing the fact that they had all completed a mindfulness course, but also because it seemed to reflect a degree of tension and conflict described by the participants. To emphasise this conflict, the theme has been split into two superordinate themes: "*Learning something new"* and "*I'm unconscious when eating".*

Each of the participants, at the point at which the interview took place, had already completed a course in mindfulness and had the opportunity to experience mindfulness techniques and teachings. It could be argued that this enabled them to reflect or recall an experience that may well have been difficult to bring to mind otherwise. However, it seemed important to see the relationship with food through mindfulness and give voice to what they experienced in this context.

3.4.1 Learning something new

One particular skill which is taught in mindfulness courses involves developing the ability to become aware of one's thoughts without necessarily going along with them or blocking them from consciousness. This seemed to be described by many of the participants as a particularly onerous or difficult task and 'unconscious' eating was often the preferred or the default position despite the knowledge about mindfulness and the ability to apply it to other parts of their lives. A useful starting point is to understand a little about how the participants understood what mindfulness meant to them.

> *"Getting rid of all those thoughts in your head and concentrating on something."*
>
> *(C:12:323-324)*

For Cheryl this meant that mindfulness was something she only did when

"…*breathing in… and cleaning my teeth" (C:13:328-330)*

Sandeep felt that his experience of being mindful was about a way of thinking that brought him joy rather than sorrow when he was eating something that he otherwise would have given himself a hard time about.

> *"I think I was kind of mindful because it, it meant that I was thinking about my past experience and what gave me some joy, some pleasure and bringing that, using that memory." (S:30:793-796)*

Kevin described that for him being mindful with food meant

> *"…to try and, um, I'm not quite sure whether it's kill whatever feelings or create feelings that, you know, that aren't there with other things." (K:16:468-470).*

He concluded that whenever he was aware of what he was eating, no matter what it was, he took this as a measure of being mindful

> *"I'm aware of it so therefore it's ok." (K:17:516-517)*

Aja put her understanding of mindfulness as simply:

> *"It's really like relaxing" (A:17:413).*

And this understanding and experience of the mindfulness techniques was shared by Jacinta, Barbara and Marsha:

"During that time, you know, I felt so much relaxed, you wouldn't believe that mindfulness, although it's once a week or… it, it made such an impact on my life. I felt so confident, you know, and very happy and relaxed, you know." (J:14:347-351)

"*…contemplative prayer (…) almost the same, the same practice really as mindfulness." (B:10:280-282)*

"…what it did help me do is to relax more, um, to go through the things I was going through at the time, whether it was physically or mentally…" (M:14:396-398)

For Marsha, she felt mindfulness was a way that she gets what she needed which was

"…some space and some lightness in myself" (M:15:444-445)

And she fully recognised for her that it

"…would either have been that or yoga" (M:16:471-472)

To a certain degree this was echoed by Kevin's observation about his experience of doing the mindfulness course and what he got out of it.

"*…accepting diabetes as a concept and something that wasn't going to go away (…) it was actually better to accept the diabetes, take the fucking pills, whatever they were, whether I liked them or not, whether I felt I needed them or not (…) I think with the mindfulness, I think it just gave me, um, a little bit of peace of mind to be able to accept that." (K:14:410-424)*

The experience of the mindfulness course and the effect it had on the participants were not always related to their experiences with food. Jacinta however, related this state of relaxation directly to how she experienced her relationship to food which was as a result of feeling relaxed:

> *"Yes, um, you don't really realise, but I didn't want food I always want, you know. I can socialise, I can go and have conversations with people. I would listen to music and just relax and think of me a bit more…" (J:15:356-359)*

Aja also described it as having a direct effect on her relationship to food:

> *"…it did get me back to eat properly and being focused on what I should eat and what I shouldn't eat. I was still doing the sweet eating but I had it… I think I was like, no I don't want it I will leave it." (A:18:421-424)*

This experience was echoed by Kevin when he spoke about how he understood mindfulness worked for him when he had just eaten something that he felt he did not need:

> *"I think the good thing for me at that moment in time in doing what I did was that it didn't turn into, you know 'So the next time I won't get off the bus. I fucked up therefore I'm going to go in there and buy another bar of chocolate' it was like 'Well, you've done that again, haven't you? It wasn't all that' you know." (K:20:600-605).*

This idea of mindfulness as meaning perhaps a degree of self-compassion and noticing how and what was eaten, was something Marsha was also in touch with. The way she felt mindfulness affected her relationship with food was by

"…being able to control and to realise what you're eating. To get in touch with your, your feelings and what it's like rather than sort of spooning it in, so it's, yeah, it's about managing how much you eat and what you eat and how you do that eating." (M:17:500-504)

For others, the conscious effort of thinking and taking control is something that many participants, like Aja and Barbara, were able to recognise as a major part of being mindful.

"When I was going to the group, I remember I used to, um, make… yeah, make the effort of thinking of what I'm eating, um, what, how am I eating, what am I eating. It just made you think it did." (A:19:465-468).

"You do grow into self-awareness and you do become very aware that your, your body and your mind and your spirit are in fact one entity and they're linked (…) so you must care equally for all and I know that area is not really in balance with the other two (…) it's been like a three-legged stool (…) it's something I'm working on (…) and damage limitation at the moment (…) I haven't got there but its balancing. That stool is sittable on now." (B:21-22:566-592).

For Vea, the experience of being mindful was also described in direct experience with food. Mindfulness apparently had a powerful effect on her and as a result described this experience when she said:

"…my relationship with food is changing drastically." (V:13:320-321)

She felt that mindfulness helped her to change her relationship with food from being an emotional one to one that became a guide for what to eat.

"I eat not because I want to comfort myself, I eat because I have to eat for survival, for energy because I've got diabetes. I've got to eat some or I'll go into a hypo, you know, I look at food in a different light and I'm not angry with myself for my comfort eating, but it's just that I have learned something new." (V:10:239-244).

She described her comfort as coming from a different source since the mindfulness course which had reconnected her to something meaningful. She said eating was no longer about how she felt and that although she had tempered her emotional needs with food before, being mindful led her to find comfort elsewhere. This correlated with her religious beliefs too.

"So, whereas before I would grab the biscuit tin and things, you know, comfort eating myself but now I just open the Bible." (V:14:355-357)

The effect of mindfulness practices on most of the participants was therefore described in positive terms. However, there was another side to these experiences as was signposted by Kevin, when he admitted that although in theory he believed it was possible to change ones relationship with food through mindfulness it was not an easy thing to do

"…whether in reality I manage to live that way is a slightly different argument." (K:15:452-453)

Barbara found that being mindful was difficult and it required quite an effort on her part.

"…old habits die hard, so it, it's one of those areas that I have to still be consciously working at and consciously reminding of." (B:17:451-453)

This experience is what we turn our attention to now as we consider the tensions held between being taught mindfulness skills and practicing mindfulness as Sandeep articulated:

> *"…there is a tension to it and when you look at it superficially it, it's pretty stupid, you know. It's a chocolate éclair on a shelf, you know. What's the big deal? Just walk away from it. But to have that emotional content somewhere, it's, it's kind of painful there in some ways." (S:27:734-738)*

3.4.2 I'm unconscious when eating

Mindfulness seemed to be a double-edged sword for many of the participants as illustrated by the contradictory themes throughout the data. Apart from the effects of the course for some being described as short-lived, other difficulties were described by the participants. The tension between the positive aspects of mindfulness and the negatives of being mindful may well be mediated by the difficulties that some of the participants had with being, or continuing to be, mindful in relation to food. To illustrate this, Sandeep captured this experience when he spoke about the difficulties he had with being mindful about food.

> *"I think to engage, over engage with it is painful (…) and having to control things or to think too deeply about things." (S:28:745-751)*

He went on to describe how this "over" engagement of thinking about food makes him feel like a failure:

> *"…always feeling that having failed in it so many times that reaching that goal it becomes another test again of failure, you know. Not actually being able to beat the beast." (S:29:770-772)*

The "beast" was described as

"…*just going out and pigging on… something" (S:24:637-638)*

Kevin described it as

"…still a bit of a battle." (K:15:448)

He went on to describe that how he did this mindfully was to let his thoughts go

"…*in one ear and out the other." (K:16:490-491)*

He felt that this allowed him to disengage from having a battle with himself and he felt that the way to do this was

"…making it such a conscious thing becomes less conscious and more unconscious." (K:17:510-512)

There was an apparent reversal of the process of being mindful of their thinking, or being aware of their thoughts. For both Sandeep and Kevin, it seemed that becoming aware of their thoughts was the technique that seemed to distress them. An example of this came with the sense of failure felt by Sandeep which was all the more acutely felt when he had actually just been mindful with food and had fed himself good healthy food.

"…it wasn't really... not at all necessary because the food I had an hour before was more than satisfying and of good quality." (S:24:641-643)

Kevin, likewise, described buying a bar of chocolate on the way to the interview and having a battle with himself.

"…here you go, you're doing this again (…) I think there was, you know, there was a bit of a 'I'm not doing that again' you know, 'We're not going through that conversation in our own head again are we?' you know, just, you know 'eat it, get it over with and we'll move on.'" (K:19:560-566)

He went on to describe it was

"…very much the reverse of a mindful event." (K:19:572)

After asking if he could imagine it being a different experience if he had been mindful at that point, he admitted that

"…I think I would have found it quite difficult to just go mindful… you know, have a mindful moment… take a few breaths er before you make that decision (…) it would have been to take a moment in my, you know, just go 'phew, is this something you really want to be doing?' It's quite difficult for me sometimes to do that." (K:20:580-590)

Mindfulness for Cheryl was not experienced at all as being related to food.

"I've never thought about anything to do with food and mindfulness." (C:13:331-332)

For her, applying mindfulness was not possible in relation to food.

"I couldn't possibly clear my mind while I'm eating. There's too much going on." (C:13:332-333)

For Vea, experiences with food had changed and she described how she had eaten chocolate and sweet stuff in the past before the mindfulness course.

"…last year I stuffed myself with it, you know, but things like that no longer interest me." (V:26:673-675)

However, unlike the difficulties that others described having in being mindful with food, Vea went on to describe how mindfulness had seemingly taken that love of food almost completely away.

"…the love relationship I used to have with my bread is not even there. I eat because I have to eat it." (V:14:364-366)

This change in her relationship to food extended to others who visited her too

"If anyone come to my house, they will find milk in my home. Him have tea and milk and a slice of bread." (V:26:676-679)

As with Vea, mindfulness had also made Barbara so aware of the emotional eating that she had been engaging in that she felt that mindfulness had made any emotions or desires she had had about food

"…been a bit obliterated." (B:19:516)

She goes on to express this further as

"…a sense of deprivation of the pleasure of eating." (B:20:544-545)

Rather than it being a rewarding experience, being mindful actually resulted in her experiencing deprivation. It is not possible to know the process that Barbara had gone through to get to this state of deprivation, but this 'falling out of love with food' was also described by Marsha and was a gradual process which had continued to the point where she wondered:

> *"Is there a pill you can eat that I don't need to go through all that (…) I don't think I would because I'm so fed up with all the pills I have to take now. I don't think I would (…) so I put up with eating." (M:21:612-620)*

Marsha's experience of eating had been reduced to 'putting up' with it to such an extent that she would rather take a pill. Her relationship with food seemed to be experienced as a huge chore which was echoed by Barbara. Dealing with food was so difficult that she did not want to have anything to do with it.

> *"…it is still a chore, it's still something that I don't enjoy and then doing it for yourself and then sitting down and eating it for yourself is kind of a lonely business (…) I don't regard it as an essential resource of my life." (B:15:421-425)*

The loneliness aspect of eating is touched upon by Barbara and this will be explored in more detail later as it seems to be an issue with how the relationship with food is experienced.

Aja still loved her food but she found her relationship with it since the mindfulness course is tinged with what sounds like a degree of confusion.

"I don't know how the, how health… health carers and the… would like us, you know, diabetic people, to eat in managing our own er intake and exercise and everything that comes with, you know, being alive, looking after yourself." (A:31:737-740)

Aja's confusion seemed to be part of what led her to believe she was unable to make changes.

"I don't know about making changes. I've tried making changes… I went to… I went to all the sessions, I went to all the zumbas, I went to all the exercises, I did all the walking, but sometimes I just can't be bothered." (A:32:771-774)

The felt sense of mindfulness as not being as effective as food is seen in how Kevin described how it was for him.

"It's almost, you know, that sort of thing of eating, it's almost a way of just getting rid of that annoying, annoying feeling, thought, whatever it is." (K:20:607-610).

Cheryl put it more succinctly when she said:

"Well if I'm fed up I'll eat." (C:9:231)

Cheryl was also aware that if she was at all mindful when eating it was not done intentionally.

"...it's not conscious, if it's mindfulness, it's not conscious." (C:12:319-320)

The idea of being 'unconscious' when eating was explored further by Kevin who turned the experience of becoming unconscious around so that it was not so much the state one enters prior to eating, but is the effect of eating, specifically overeating.

"…I think there is a narcotic effect, er, to, specifically to overeating, er, there is a ….it's a sense-dulling sort of soporific, you know, feeling of, er, whatever, you know, I mean, you know I've heard people talk about, er, you know food, you know, a food fog or a food coma or whatever and you can just sort of eat yourself almost into an unconscious state with food." (K:11:330-338)

Here the imagery is of food as a drug and the way it is talked about is with some hesitancy and constant checking with the use of "you know". The effect was one of careful exploration and perhaps wariness. Kevin spoke about how he used food in a way that mindfulness was unable to do. For him he believed a chocolate bar

"…*would improve my life… I mean whatever, somehow it would make me feel happy, or, er, give me some energy or any of those things, you know. Somehow it was going to make me feel better, you know." (K:21:613-616)*

And when it came to making mindful decisions about food when he was in a low mood

"…I tend to go, you know, I feel like a kid wandering around giving everything the V signals, you know. You know, you know just 'fuck off, fuck off, fuck off' and that goes for mindfulness as well." (K:22:651-654)

The post-course chore of maintaining progress that may have been made during the course was also something that proved difficult. For some, the difficulties started straight after the mindfulness course finished. Aja found that the mindfulness course had an effect on her but it would very quickly wear off.

"*I used to be okay for that day or for a couple of days when I used to go to her sessions." (A:17:405-406)*

But as with the in-between sessions effect, there was a creeping inertia if she was not actually at the course.

"I've noticed that I have to be going to sessions or doing something to keep me off… you know, doing those things. Seeing somebody on a regular basis, every day, every week." (A:18:429-432)

The need for seeing somebody on a regular basis was something Aja felt was necessary to stop her from "doing those things" as if she was feeling incapable of doing it for herself. But as soon as the group had finished, as was the case with other participants, the effects of mindfulness were experienced as being short lived and a few participants, such as Aja and Jacinta, described the difficulties of putting it into practice after the course finished.

"*I just tend to slowly gradually go back to as I was eating (…) I don't think about it at all, I try to, try to remember what those sessions, but it's just sometimes I just can't be bothered." (A:20:470-474)*

"You need to stop and think where you are. It seems as though I've just in a like tunnel vision. I can't really think outside that, oh you should stop, relax and you know, just be calm and stay in your front room, do a bit of meditation. I don't know. All those things just go out of the window." (J:15:369-374)

Jacinta seemed to accept some responsibility for why things went out of the window.

"Yeah. I could have, you know, continued to practise, but suddenly, you know, it just went (…) Not immediate, after I was continuing to do it but it gradually disappeared because I needed, like, a social atmosphere to help me continue that." (J:16:382-387)

She described her disappointment about her inability to continue using mindfulness.

"It's sad. I think I know I should be able to do better, but you know, it's just I lose everything, you know, just can't manage." (J:17:413-415)

There seemed to be a social aspect to mindfulness, as mentioned previously by Barbara, that was experienced and described by many of the participants, such as Jacinta, as being difficult to manage without after the course had finished.

"…when I'm out socially, I… food is not a problem, I can have just a handful or if any at all, but when I'm indoors, that's the trouble so sometimes I try my hardest not to be indoors." (J:18:430-434)

Aja seemed to experience the loss of the group as having a direct effect on her ability to do anything for herself.

"Afterwards when it stops, I just get oh, you know. If only it carried on every week like this for me, it would be so nice, you know, I had some reason to look forward to coming to the sessions as well, I do (…) I won't do it for myself, I would do… probably do it when I'm with people. I think I am much better when I'm around people. I tend to carry out whatever I need to do or whatever they want the, you know, the outcome to be (…) it's when they leave you to carry on, that's when it's the hardest, doing it on your own." (A:35:857-869)

Sandeep also referred to the social aspect of food through talking about his loneliness as being a big part of his unhealthy eating as he felt it drove him to

> *"…go to the shop and buy stuff that I didn't really need (**Researcher:** (…) what was the need for?) Just to be outside… I don't know, just to be in the shop. Just to go out and get dressed and go to the shop, I think as much as anything else (…) I don't know, it was just being part of the rest of the world, you know. Just being part of the rest of the world." (S:20-21:546-558)*

The experience of loneliness seemed to play a big part in the way many participants related to food. Sandeep expressed a need to be "part of the rest of the world" and the way he repeated it after some deliberation emphasised its importance to him, and the heartfelt nature of this experience for him. Barbara also described what she needed in response to asking her what would make food more enjoyable.

> *"…I need the communication more than food. Communication is giving me more reward, as it were. More interaction, more… yeah. Yeah. It's not coming from food." (B:21:553-556)*

There was a sense from Barbara that food had indeed become something that had lost its importance

> *"…I don't regard it as essential resource of my life." (B:15:424-425)*

The degree of inertia described by the participants was exemplified by Aja who felt that when it came to eating mindfully

"I do sometimes feel I can't be bothered." (A:19:447)

Like Aja, Barbara had a mixed relationship with food from a mindfulness perspective.

"…sitting down eating. It's kind… sometimes feels like an interruption." (B:16:436-437)

The inertia was palpable as she and others spoke about their relationship with food, even up to the last time they had eaten which was just before the interview.

"*I should have had what I had prepared… what I had in mind which was a tinned tuna (…) but I was tired and I didn't want to be bothered and I ate two currant buns (…) there's a sense of, um, I should be getting on with something else. The time I spend in the preparation of food or, um, maybe I'm not giving that the degree of importance, discipline that I should still." (B:24:638-653)*

Barbara found food and eating a chore and resented it especially as being mindful about food required time and effort as far as she was concerned.

"I thinks it's a resentment that I'm having to spend some precious time which I could be doing something else, or something, um also I've had such a bad relationship with it for so long, so you're having to almost engage with it again." (B:17:473-476)

It seemed that many of the participants found it difficult to use mindfulness when in a bad place or facing difficulties. Kevin became, as he spoke, acutely aware of his experience of mindfulness and his relationship with food which he felt

"…only works in the good times for me… if I'm low mood, er, I find it very difficult to connect mindfully." (K:21:635-637)

Practicing mindfulness when in a relaxed and happy seemed to offer some sort of sanctuary from food.

"Funny enough, it's if, when I'm relaxed is when I remember to use it, but when I'm down, when I feel low, I don't even… but when I relax sometimes (…) I would sit down and feel so comfortable and I would do some, some, some mindfulness and I don't even want lunch because I'm so relaxed and happy." (K:28:667-674)

The experience of being in a good place as mentioned in Kevin's experience was something that others could also identify with. For example, Cheryl also felt that eating well was very much to do with being in a good place.

"Sometimes, when I'm in a very good place I think [Cheryl] you've got to be good, you've got to… and er two or three days in a row I might have a very good well-balanced diet." (C:21:546-548)

The effect of a good mood on Jacinta meant that she was able to be

"…more conscious. I, I, I know I just eat half of like a half of a banana, a small banana, apples." (J:7:150-151)

For Marsha, she felt that since she was not caring for anyone else's needs anymore, this helped her to do things mindfully.

"Now I can really sit down and have a breakfast and then get up and clean it and move on." (M:18:524-526)

Whether this was because she was in a better space would be speculative but she gives the impression that mindfulness was now possible because she had time to herself.

Sandeep's experience was simply put as

"…when I'm happy I'm disciplined." (S:12:336)

Maintaining progress made on a mindfulness course overall seemed to be difficult. Vea, however, found a way in order for her to maintain the changes she had made in her relationship with food. She described her philosophy on how this happened and how she personally needs external verification of her physical appearance to know that she was making, and had made, changes.

"…to maintain the way I'm going to eat, you've got to change your ways as well, everything about yourself. If you just wearing this Abba makeup all the time you're going to change, you still look like Abba with Abba makeup, but if you change it's something different." (V:27:707-712)

The idea that mindfulness was going to be the answer to changing the participants' relationships with food is probably best summed up by Barbara. Here it is interpreted that there is a period of awakening that perhaps needs to happen, and that it is a process to achieving a good relationship with food. Just as in the mindfulness course the starting point for getting to know yourself and your needs differently is with the body .

*"…it's like really not being {*Barbara*}, not having fully owned [*Barbara]*s body, how [*Barbara*] wants to eat and what [*Barbara*]'s going to cook. It does boil down to that really. Um, and that's how I ended up as a very undeveloped short little leg of a stool." (B:27:723-727)*

3.5 Conclusions

The relationship with food was of interest with regards to those who have type 2 diabetes and have completed a course in mindfulness. The qualitative nature of this research is to describe the experiences the participants have in their relationship with food. This is not about establishing what effect, if any, mindfulness has on this relationship or to determine how diabetes affected the relationship, but accepting that all the participants had a shared experience of diabetes and mindfulness from which these private experiences have emerged. In exploring the relationship to food in the context of diabetes and mindfulness, many of the participants described changes that were both positive and painful.

The positive changes centred on the ability to have self-compassion. This was seen in the ways in which they reflected on experiences following the course, such as feeling confident or being able to socialise, or having a sense of lightness and space and being able to relax. For some, there was a reconnection to a spirituality or belief and being able to access their feelings rather than just eating for comfort. There was also a great deal of acceptance of where they were in the moment at times when they would have a forgiving attitude toward their unhealthful eating rather than berating themselves.

The painful changes that many of the participants described came about because of increased awareness of what they were doing and yet feeling unable to consistently change the way they related to food. This may have been due to not having an alternative relationship or skillset to manage a change in behaviour. It could also be put down to the desire or compulsion to continue to connect to their childhood or the difficulties leaving the childhood in

the past. It could also be the unwillingness to give into the physical cravings and 'illicit' relationships with food. For some, having diabetes did not change their relationship to food per se, even when the physical sensations of having "funny spells" (M:7:204) or feeling like they were in "an unconscious state" or "a food fog" (K:11:336, 338) was apparent. There was still a strong need for some of the participants to use food to gain a particular sensation or meet an otherwise unmet need or craving or to soothe an otherwise inaccessible pain.

CHAPTER 4: Discussion

4.1 Introduction

This final chapter will provide a comprehensive review of the research study beginning with a summary of the findings. The findings will be located in the wider psychology literature that may help to make sense of the analysis further. This will then lead into examining the analysis in light of the state of relevant theories in the field of psychology as outlined in the introduction chapter and in relation to what this study has found. This is followed by a reflexive piece on the process and methodology of the research and implications for clinical practice and suggestions for further research. The chapter concludes with final reflections by the researcher and conclusions.

4.2 Research aims and summary of research findings

"...food is nice to see, it looks lovely, but it's not for me..." (Marsha)

The primary aim of this study was to explore how people with type 2 diabetes experience their relationship with food after attending a group mindfulness-based intervention (MBI). Specifically, the objective of this study was to understand the experiences of how a group of people with diabetes (PWD) cope with eating after attending an MBI using a phenomenological approach. This has important implications for the field of counselling psychology because the findings from this study can enhance our understanding of the challenges and potential opportunities this particular topic has to offer. This study was aimed at exploring what the participants' relationship was to food since being taught the skills of mindfulness. As suggested by the literature review in Chapter 1, there has been a debate on how mindfulness can help PWD and the diversity of problems associated with the self-management of diabetes. The targets for mindfulness programmes aimed at PWD have only recently begun to incorporate this diversity by focusing on not just the eating behaviours involved, which are varied and not necessarily pathological, but also the targeting of self-blame and shame. The findings here intend to illuminate the diversity of issues faced by PWD as

they attempt to manage the tension between what they eat and why they eat, and how this is experienced following an MBI. These elements are represented by the master themes of 'Agony and ecstasy', 'Vulnerable and undisciplined child' and 'What has mindfulness ever done for me?' This tension was conceptualised and pulled together by the overarching theme of 'Chaos: the embodiment of conflict'.

What emerged from the findings of this study were a number of threads that are examined as separate research topics in the literature, namely the food cravings, the influence of attachment insecurity and the experience of mindfulness training on participants' behaviours and attitudes (see Figure 3.1). The idea of chaos was a response to the complexities involved in living with and managing diabetes, and that there is not one simple explanation or theory that could neatly sum up what PWD experience on a day-to-day basis. The assertions that I make are based on the connections I have made within the analysis, my own professional experience and the available evidence-based literature. The aim of IPA studies, according to Smith et al. (2009), is not to generalise but to determine what the findings add to existing theories. As a result, I considered the literature that aligns the most with the findings in this study and discuss how the findings sit within current theories and, in the process, add to the current knowledge that informs the psychological treatment of people with diabetes.

4.3 Agony and ecstasy

"...changing my diet, it's something I found much more difficult than giving up smoking" (Sandeep)

The 'agony and ecstasy' master theme was an attempt to capture both the reported passion for food and the self-harm that the participants experienced. One of the findings that appeared to come to light for these participants was the reported inability to resist cravings for particular items of food that they have been specifically advised against consuming or advised to consume in moderation, despite being fully aware of the potential harmful consequences for

them due to having diabetes as outlined in Chapter 1. Hence the 'agony' involved in harming themselves with food and the 'ecstasy' of giving in to the passion for food.

4.3.1 What was found? A brief overview of the findings

The current study reported experiences of the participants who had cravings for foods: Barbara, Aja, Jacinta Kevin and Sandeep, specifically. For example, Aja reported it was curry that her mother used to make that she craved and for Sandeep, cravings were triggered by the "wave of fat smells" from the street that "brought back the atmosphere of the warm climate" he had lived in as a boy. Meanwhile, Jacinta reported feeling that she could not resist the urge to "go out and get some sweets" even late at night. It seemed as if these initial thoughts set off a sense of desperation as Aja reported "I can't help it", and found it hard to resist but after tasting, there was a sense of relief. As Jacinta said: "It makes you feel good", and Sandeep referred to "seeking a sensation". However, the downside for the participants was the feeling after, which ranged from feeling like a criminal and disgusted with themselves (Sandeep) and the feeling of "stabbing yourself" with food and being in a constant battle (Kevin), or poisoning oneself (Sandeep) to regarding the food intake as a "hidden killer" (Aja). For Jacinta, it was the guilt of knowing she should not be eating what she had eaten.

4.3.2 What this means in relation to other evidence and theories

These findings give us a further insight into the experiences with food that have been found in similar studies, such as the constant battle of managing diabetes as reported by Kneck, Fagerberg, Eriksson & Lundman (2014), and the consistent theme of shame (Beverly, Ritholz, Brooks et al. 2012; Kato, Fujimaki, Fujimori et al. 2016; Kneck, Fagerberg, Eriksson & Lundman, 2014; Rayman and Ellison, 2004). These studies investigated the barriers to self-management of diabetes and this current study offers a more in-depth insight on one specific aspect of self-management which is about food and eating. This has enabled a specific context to be shown to hold many of the generally reported issues of managing diabetes. The

concept of cravings however, was not picked up in these studies, which could be due to the fact that they were not specifically focused on food. This study provides further insights into managing diabetes and considers a possible conflict between what is eaten and why they are eating. Cravings have also been identified as being associated with related issues for PWD such as obesity, binge eating and dropping out of weight loss programmes (Gendall, Joyce, Sullivan & Bulik, 1998; Schlundt, Virts, Sbrocco & Pope-Cordle, 1993; Sitton, 1991). The restrictive nature of the diets for PWD can therefore create problems including the risk of binge eating (Fairburn 2008) and obesity (Haines & Neumark-Sztainer, 2006).

Previous research, as outlined in Chapter 1, has shown that the mixed results from CBT and mindfulness programmes indicate that they have not yet adequately captured the psychological processes of optimal diabetes self-management. Tapper (2018) reviewed thirty studies that examined the effects of mindfulness practices on cravings and interpreted these in light of a number of relevant theories related to craving. She found that the Elaborated Intrusion Theory of desire (EIT; Kavanagh, Andrade & May, 2005) had the most support and so it is to this theory that this study refers to help illuminate these present findings.

The reported experiences of the participants seemed to emerge from thinking about a particular target food which reportedly occurs despite having perhaps already eaten a healthy meal recently. The possible mechanisms for this process of craving, according to the EIT of desire, suggests that there is an initial intrusion of thoughts which are triggered by cues in the environment or cognitions, physiological deficit or negative affect and associated with a particular behaviour (i.e. eating). This then triggers an automatic system of directing one's attention to food. If food is not obtained and there is a strong affective reaction, it moves into conscious awareness and is elaborated (May, Andrade, Kavanagh & Hetherington, 2012). Therefore, Sandeep's cravings, for example, were set off by "waves of fat smells". The demands on the working memory at this point are low and can be experienced as spontaneous. However, if the target food item elicits a strong sense of physiological

deprivation or a strong affect response then this will be followed by the elaboration of these initial thoughts. This takes place in working memory and an internal and external process of searching for relevant information in memory and manipulated in working memory has the effect of increasing the vividness of sensory images (such as taste). Sandeep found an emotionally-charged memory of when he was a child in a warmer climate which suggests both a deprivation and pleasure. The more vivid, textured and emotionally-charged the image becomes, the more the desire grows. Sandeep's imagery included smells, happiness, memories of warmth, and even the texture and colour of particular foods. There were a number of references from the participants about the associated emotions involved with eating. Jacinta felt that food cravings stopped her from "screaming" and described herself as "not in a good place". The findings of this study included a number of the participants making references to loneliness and a need for connection. As Sandeep put it, "just being part of the rest of the world" which brings with it the risk of external cues of food. The embodiment of these emotional memories may therefore be responsible for producing a well-used behavioural response when certain cues from the environment or emotions set them up for craving particular food items. Concurrent desires, such as to keep blood sugar levels stable, would then have to compete for attention and priority. The emotional reactions, according to EIT, tend to be negative due to the state of deprivation and the desire to be satiated. This was evident in Aja's account of "I have to have it" and Jacinta's "need" for the "fastest thing I can find" and the awareness that these desires come for "no apparent reason". However, if this is not possible or there is an attempt to resist the craving, then feelings of guilt can compound the negative effect (Kemps & Tiggemann, 2007). The guilt for some of the participants came from having these cravings in the first place despite not being hungry and perhaps even trying unsuccessfully to satiate themselves with healthy food. Jacinta reported having nuts and raisins to try to keep away from sweets, but in the end, she had to go out at 10pm to satisfy her cravings. There is also the issue of trying to keep to a diet that is compatible with managing diabetes and keeping blood sugar levels stable, which will mean sugary foods in particular would need to be cut out or reduced considerably, adding to the sense of deprivation which may be a particular issue

for PWD due the necessity of a restrictive diet to control blood sugar levels. There is evidence in the literature on EIT that chocolate or other sugary items of food are typical items of craving (Kemps & Tiggemann, 2007; May, Andrade, Kavanagh & Hetherington, 2012; Schumacher, Kemps & Tiggemann, 2017). This also seems to be the case for the participants such as Barbara "…sweet stuff. Mainly chocolate" or "sugary stuff", or sweets for Aja, Jacinta and Sandeep. The studies cited in support of EIT used laboratory settings which may not reflect the behaviour in daily life nor of the specific issues related to PWD. There were also savoury cravings like curry or meat for Aja and Sandeep which are more difficult cravings to study and distinguish from hunger (Hamilton, Fawson, Andrade & Kavanagh, 2013).

The difficulties in being able to resist these cravings, according to the EIT, is the lack of reduction in the intrusive thoughts or elaboration which could be achieved via either competing desires or interrupting these processes by loading the working memory (Kavanagh, Andrade & May, 2005). This can be achieved via present moment awareness by attending to different internal sensations rather than the internal image at the point of intrusions and via decentring techniques at the point of elaboration to see thoughts as just thoughts and not necessarily truths to be reacted to (Kavanagh, Andrade & May, 2005; Kemps & Tiggemann, 2007; May, et al., 2012; Schumacher, et al., 2017; Tapper, 2018). The participants reported a limited ability to resist cravings if at all and this may be due to the amount of time that had passed since the course. It could also be that there is a lack of competing desires that match the sensory nature of the target desire, or a lack of interoceptive awareness. For those who reported what their mindful approach would be spoke of acceptance, such as Kevin's "Well you've done that again, haven't you? It wasn't all that", and Vea's "I'm not angry with myself for my comfort eating", and yet acceptance may actually exacerbate cravings (Tapper, 2018). According to the EIT, if an individual is encouraged to accept their thoughts and feelings in the absence of any further guidance then this may lead to continued elaboration. For Sandeep, the ruminations led to the sensation of pain despite his attempt to accept that "it's just a

chocolate éclair, what's the big deal?" and for Kevin eating the food he craved was a way of "getting rid of that annoying feeling, thought".

In terms of interoceptive awareness, the participants talked about needing and wanting something and not being able to resist having it with no reference to their bodies until after the intake of food which is when the agony began and they experienced feelings they described as like being 'stabbed' or 'poisoned'. Aja talked of the 'hidden killer', which she reported as having no effect on her at all that she could detect. It is possible that these particular experiences can be explained by the fact that the course they attended did not specifically address hunger and satiety awareness, or that at this point they remained symptomless and restricted food items were not having the expected negative effect on their bodies.

This current study suggests that there are reports of intense cravings and a seemingly lack of ability to control the amount they eat despite being in full knowledge of the harm it might be doing to them. This may suggest that affective and cognitive aspects of eating play more of a role in their reported cravings. Again this can be explained in part by the EIT theory inasmuch that this suggests that the capacity of working memory is taken up with the intrusive thought. This may be especially true in those for whom managing their blood sugar levels is proving difficult as they will be already preoccupied with food. However, consistent with EIT there is research that suggests that by loading working memory reductions in cravings can be achieved in the moment (Nosen & Woody, 2013). Additionally, if a behaviour is suppressed in a consistent way and present-moment awareness is utilised to hold in mind the disadvantages of giving into the craving then, according to both EIT and Buddhist theory, cravings will reduce (Analayo, 2018; Tapper, 2018). This aligns the Buddhist theory of cravings with EIT. As yet, research in this area has not applied itself to the additional complications of a long-term condition such as diabetes and how the pathogenesis of this condition may underlie many of the difficulties that some may have with their relationship with food. This makes this current

study unique and the findings suggest that there are complex and potentially well-established or embodied relationships with food that have developed since childhood.

In the current study, it could be argued that the relationship with food was indicative of self-injurious behaviour as revealed in the analysis and based on the findings that their relationship with food was conceptualised as "kindly self-harm". Self-injurious behaviour has also shown to be associated with less attachment security (Kuipers, Loenhout, Andries van der Ark & Bekker, 2015). This will be looked at in more detail in the next section.

4.4 Vulnerable and Undisciplined Child

"...turn to food for comfort because my mother was never with me." (Vea)

4.4.1 What was found? A brief overview of the findings

The reported tendency amongst the participants of this study to crave particular food items was marked by the reference to tastes from childhood: Aja craved the curry her mother used to make, and Sandeep would seek out a variety of foods like Wagon Wheels and Lion Bars which he said reminded him of his childhood. Although this overlaps with the cravings issues, it brings in for consideration the underlying processes in operation which may be unconscious and therefore different from desire or cravings but have a role to play. This is exemplified by their experiences of the loss of attachment figures which, for many of them, highlighted their sense of loneliness. Kevin lost his main carer when he was a child, and Jacinta and Vea both lost their mothers at a young age. Barbara reported the unavailability of her parents throughout her childhood and Sandeep lost his home as a child. This may have led some of the participants to reportedly either try to soothe themselves through eating certain food items from childhood because of a strong emotional response, or, reject food and merely "put up with" the chore of eating as expressed by Jacinta and Marsha. Alternatively, as Barbara reported, wanting someone else to prepare and cook her some food because she did not feel safe around it. Aja expressed her experience of finding it hard to be bothered or to take it

seriously about being careful with what and how much she ate, so just ate until she was full. Sandeep described how he would just grab something to eat and stuff it in his mouth and then go back to sleep. Whereas Cheryl spoke about how "naughty" she can be with food and what she ate.

4.4.2 What does this mean in relation to other evidence and theories?

Evidence shows that high-calorie foods can have a calming effect on the areas of the brain involved in the response to stress (Peters, Pellerin & Dallman, 2007). Amongst the participants, this also seemed evident as Kevin spoke of food having a narcotic effect and Sandeep reported that he would go to sleep immediately following a binge. There is also evidence that stress and loss can activate particular patterns or cognitive schemas known as attachment styles, and a growing body of literature on the utility of using attachment theory provides us with another lens with which to view the participants' experiences (Bowlby, 1980; Slade, 1999). In relation to the experiences of the participants in this study, attachment theory offers a compelling interpretation on the way food may be being used as an external source of emotional regulation (Armstrong & Roth, 1989; Mikulincer & Florian 1998; Tasca & Balfour, 2014; Taube-Schiff, Van Exan, Tanaka, Wnuk, Hawa & Sockalingam, 2015).

Attachment refers to the biologically-evolved behavioural system that starts from birth and is activated in anxiety-provoking situations which motivates the infant to seek proximity to a caregiver, or attachment figure to give them a sense of safety and security (Bowlby, 1969). If the attachment figure is sensitive and responsive to the child's needs, a stable sense of attachment security is established and helps the child to develop a positive mental representation of self and others. However, if the attachment figure is unreliable in their availability and support and unlikely to relieve their distress, then negative models of self and others are formed. This is likely to increase maladjustment behaviours and later emotional problems. This is particularly pertinent to the participants, due to the loss and unavailability of their primary attachment figures, namely for Vea, Barbara, Kevin and Jacinta. Securely

attached individuals tend to be able to reflect on their relationships and therefore engage in meta-cognitions. They are also able to communicate and ask for support when needed, and disclose information about themselves appropriately (Johnson, 2003). Insecurely attached individuals are more likely to demonstrate emotional neediness due to a sensitivity to loss or potential abandonment and this leads to a tendency to not trust others easily. These have particular importance to how people manage their diabetes as bodily illnesses are regarded as threats and thus trigger attachment patterns (Hunter & Maunder, 2001).

Hunter and Maunder (2001) utilise Bowlby's (1980) concept of the internal working model (IWM) which is a cognitive schema that maintains attachment patterns over a lifetime. The IWM of the insecure-anxious attachment style predicts an almost constant distress signal as a means of maintaining proximity to the attachment figure which could translate, in the case of the participants from this study, to food becoming an external source of comfort in the absence of an IWM of a secure attachment figure. Those who are anxiously attached may relate to food that follows a typical anxious-attachment style, which is to seek a relationship, in this case with food, in times of distress in order to obtain some relief but never quite feel satisfied (Mantilla, Clinton & Birgegard, 2018). This sentiment is repeated by the participants Aja and Jacinta who described themselves as searching and yearning but never quite being satisfied. There is an insatiable need for being soothed thus making emotional regulation a key deficit. Aja found it particularly difficult to stop eating and observed that she was not taking diabetes seriously "because I can't". She felt that she needed to go to the group sessions "every day". There is a suggestion that disordered eating behaviour is related to as an introjected attachment figure itself, i.e. an internalised attachment relationship (Mantilla, Clinton & Birgegard, 2018).

Insecure-avoidant IWMs predicts that others will be unreliable and so there is a tendency to be self-reliant. Illness disrupts this preference for self-reliance so there is sometimes a denial of needing anything and a rejection of medical advice and non-compliance (Hunter & Maunder, 2001). Barbara had experienced the unreliability of her parents who she

referred to in an unaffectionate way as “the couple”. Diabetes had the effect of knocking her off-balance, or as she put it, “I’ve not fully claimed and stand on my own ground as an individual… in terms of food”. The preference for self-reliance was evident when she referred to “old habits die hard” and how since receiving a diagnosis of diabetes, she found eating a chore and did not “regard it as an essential resource of my life”. It was seen as “an interruption” and she resented the time she had to spend with engaging with it. Food became a relationship with which she was now reliant and diabetes makes this a potential ongoing problem. This would also be consistent with an avoidant attachment style being associated with an increase in HbA1c levels and difficulties in adjusting to a diabetes diagnosis (Bazzazia & Besharat, 2012; Ciechanowski, Kirsch & Katon, 2002; Cohen Birnbaum, Meyuchas, Levinger, Florian & Mikulincer, 2005).

Difficulties in maintaining proximity to attachment figures, which is typical in avoidant attachments, has been associated with oscillations in blood sugar levels (Braizat, Feinn, Abbott & Wagner, 2017; Solano, 2000). This is theorised as being due to the avoidant style not allowing for the development of a sense of mastery and sensitivity to bodily needs as well as self-control at times of health crises (Maunder & Hunter, 2001). Given what has already been discussed, this could translate to particular patterns of their relationships with food where a cycle of overeating and giving into cravings may result in periods of being compliant to dietary recommendations. Sandeep, Kevin, Jacinta, Marsha and Cheryl noted when they were in a good place and relaxed, they could be mindful about what they ate, using such words as “disciplined” “more conscious” and “good well-balanced diet”, thus potentially producing oscillations of blood glucose levels.

Attachment behaviour is also related to eating disorders with mindfulness being regarded as a mediator between different attachment styles and eating behaviour (Mikulincer & Shaver, 2012; Pepping, Donovan, Zimmer-Gembeck & Hanisch, 2014). Although none of the participants were diagnosed with an eating disorder, there was evidence of disordered eating patterns. Aja referred to herself as engaging in binge eating and Kevin referred to

himself as an “unsuccessful anorexic”, a “compulsive obsessive” eater and overeater. Sandeep also suggested that he could understand his relationship with food as being akin to how people with bulimia and anorexia experience food. The relevance of attachment theory to disordered eating patterns was reviewed in a meta-analysis by Faber, Dubé and Knauper (2017). They looked at data from 70 studies and over 19,000 participants from the general population and found that higher attachment insecurity (anxiety, avoidance and fearfulness) was significantly associated with more unhealthy eating behaviours. The link between attachment and eating behaviours are suggested to be due to four interrelated mechanisms, namely: general vulnerability view; inability to regulate emotions; poor self-representation; and interpersonal difficulties (Faber, Dubé & Knauper, 2017). Therefore, unhealthy eating behaviours are seen as a maladaptive coping strategy due to an inability to cope, regulate or disengage from negative emotions and stress, in the face of poor self-representations and difficulties in relating to others (Bélanger Di Schiavi, Sabourin, Dugal, El Baalbaki & Lussier, 2014; Wilkinson, Rowe, Robinson & Hardman, 2018). For many of the participants in this study, distress featured highly in relation to food, and there was a tendency to use food to reduce this distress and therefore could represent a maladaptive coping strategy to regulate their emotions. Some reported that eating was a way to get comfort and sometimes to stop themselves from “screaming”, literally stuffing their emotions, or to “get rid of annoying thoughts”. This finding is reflected in studies such as O’Kearney’s (1996) who noted that anorexic patients appeared more avoidant of involvement in general as well as with food whereas the bulimic population seemed angrier and more chaotic.

There is also some evidence that those with binge eating disorders had a higher incidence of loss and a pattern of attachment disorganisation (Barone & Guiducci, 2008). With regards to loss, the stages of mourning are described as numbness, yearning and searching, disorganisation and despair, and finally, reorganisation (Bowlby, 1980). The yearning and searching is understood in attachment theory as behaviour based in the hope of restoring the lost person although the resumption of personal relationships may never be fully attained

(Bowlby 1980). The full and complete acceptance of the new situation could be interpreted as being somehow thwarted despite diabetes education ("it's too confusing") and the mindfulness course ("it's too much like hard work"). If the absence of a new IWM continues, the disorganisation and despair stage comes next and is associated with a fragmented sense of self. This idea resonates with the experiences that many of the participants tried to make sense of. The undisciplined and chaotic nature of Kevin, Aja and Sandeep's eating comes to mind as possible examples of disorganisation where they reported giving up on controlling what they ate and eating whatever and whenever they liked. The experience of loss is echoed by the reported experiences of the current participants and is an experience reflected in much of the research in the last decade (O'Shaughnessy & Dallos, 2009; D'Argenio, Mazzi, Pecchioli, Di Lorenzo, Siracusano & Troisi, 2009).

These findings also correspond with studies suggesting that the reason why those with insecure attachment styles have problems around eating is due to misinterpreting their attachment anxiety signals and fears of abandonment as hunger (Alexander & Siegel, 2013). For example, Barbara was eating to fill a gap left by parents who were unavailable to her and that for her, "food equals love". Vea reflected that she had turned to food "because my mother was never with me" and she thought it was a way of "keeping her alive inside" her, like an internal version. Kevin voiced how his relationship with his main carer who died when he was young was closely tied to his relationship with food and that by feeding himself, he was "loving and caring for myself". Jacinta had come to realise that she had been eating as a coping mechanism after her mother died. Gilbert (2009) suggested that self-compassion is related to attachment theory where those with insecure attachment styles, i.e. anxious or avoidant styles, are less able to self-soothe (Gilbert & Proctor, 2006). These cases may imply that patients with diabetes who overeat may benefit from being taught to increase their awareness of physical and emotional internal cues (Warren, Smith & Ashwell, 2017) and how to self-soothe. Gilbert suggests this needs to be done in a way that is self-compassionate rather than relying on external sources like food (Gilbert, 2010).

Bowlby (1977) said: “Whilst especially evident during early childhood, attachment behaviour is held to characterise human beings from the cradle to the grave” (p. 129). Attachment patterns in adulthood are subject to changes due to experiences throughout one’s life. For those who went on to experience nurturing and supportive relationships, in the case of Vea and Barbara with God, then it becomes possible that “old routines rendered meaningless give way to new habits” (Gomez, 1997, p. 165). This is when new relationships with food become possible and Vea would “just open the Bible” instead of “grabbing the biscuit tin” and Barbara spoke of her reengagement with “contemplative prayer”. There is some evidence that an attachment to God can protect an individual from eating disorders (Homan & Boyatzis (2010). This seems to suggest that patients with diabetes who have unhealthy eating behaviours may benefit from help with establishing new relationships to enable the formation of new habits (Gomez, 1997). It also suggests that either the mindfulness training should be longer which can mean better outcomes (Warren, Smith, & Ashwell, 2017), or that some way is found to engage in mindful eating behaviours as a way of life beyond the classroom (Miller, 2017). Although it was not the scope of the study to examine the long-term impact of mindfulness, it is helpful to consider that these participants at the time of interview were at least a year past the end of the mindfulness course and this may have impacted on the results seen here. It is also noted that the course did not specifically target eating behaviour and this too may have had an impact on the ability to engage in new eating behaviours. There is some evidence that the negative impact of overeating needs to be continuously brought to mind along with the new experiences of mindful eating to reduce cravings (Analayo, 2018). These issues are discussed further in the limitations section.

The reported experiences seem to indicate that the participants’ relationships to food was the same even prior to a diagnosis of diabetes. Attachment theory has been applied to these experiences as a way of illuminating the possible underlying mechanisms for these difficult relationships and the findings here add to the body of evidence in the literature. The distress of a chronic condition, like diabetes, is regarded as a threat which sets off in motion

particular attachment styles in an effort to reduce the distress. Some of these styles such as insecure-avoidant and insecure-anxious may lead to the particular patterns of using food to regulate emotions as evidenced by the participants.

In considering the role of attachment it must be kept in mind that most of these studies are correlational designs so do not represent proof. The studies also use different measures of attachment style for example using the Adult Attachment Interview (AAI; George, Kaplan & Main, 1996) or a self-report relationship questionnaire (RQ: Bartholomew & Horowitz, 1991). This makes it difficult to compare across studies and there is also a lack of studies looking at the difference between men and women in attachment styles in relation to eating behaviours. One study showed that when this was investigated the insecure attachment style in men did not predict eating disorders which raises the issue of why this may be the case (Elgin & Pritchard, 2006). The differences between men and women were not highlighted in a review of current research (Tasca & Balfour, 2014). This may reflect the tendency to focus on clinically diagnosed eating disorders which is more common in women than men but there is evidence that men are more likely than women to report overeating rather than disordered eating styles (Striegel-Moore, Rosselli, Perrin, et al. 2009). This aside, what the findings suggest is that where there is evidence of disordered or overeating behaviours, attachment theory may be able to offer insight into the behaviours that is plausible.

According to the literature on mindfulness, in order to be mindful, one needs to be able to mentalise a security-enhancing representation (Fonagy & Target, 1997; Fonagy, Target, Steele & Steele, 1998). This ability is compromised in people with an insecure attachment style and people with particular difficulties with overeating tend to be insecurely attached (D'Argenio, Mazzi, Pecchioli, Di Lorenzo, Siracusano & Troisi, 2009; Kuipers, Loenhout, Andries van der Ark & Bekker, 2015; O'Shaughnessy & Dallos, 2009). This in turn may lead to difficulties for some to engage in interventions such as mindfulness whilst for others this can help turn their lives around as shown by Vea (Robins & Ayling, 2018).

4.5 What has mindfulness ever done for me?

"...as for mindfulness, it's something unfortunately that only works in the good times...if I'm low mood I find it very difficult to connect mindfully." (Kevin)

4.5.1 What was found? A brief overview of the findings

The difficulties of managing diabetes is often the participants' underlying reason for the attendance on a mindfulness course. The particular MBCT course that was attended by all of the participants is detailed in Chapter 2. What was apparent in the analysis, was that all of the participants learnt something about being mindful. In terms of the core features of mindfulness, there was reported evidence of an increase in awareness and attention, especially in relation to what they were eating. Marsha, Aja, Barbara and Jacinta described making the effort to be consciously aware of what they were eating by noticing that when they were mindful they no longer wanted the food they had usually wanted. They also thought more about themselves and took care over what they prepared and ate and leaving sweet food by focusing on what they should eat without giving themselves a hard time about it. Barbara was particularly aware of her body and this self-awareness for her was about developing balance and taking back control. There was also some evidence of an increase in self-compassion from Vea for all the times in the past she had eaten to comfort herself and the realisation that it was not her fault and that this behaviour went back to her early childhood. For some – Aja, Barbara, Jacinta and Marsha – they experienced what could be regarded as a by-product of mindfulness, namely, a sense of relaxation, or a sense of "space or some lightness" according to Marsha. For others, like Kevin, it helped them to "accept the diabetes" and this in return gave them some peace of mind.

The analysis also illuminated how difficult it was for some participants to maintain progress and to change their relationship with food. They reported falling into "old habits" as

described by nearly all of the participants other than Vea. This was recognised by the participants as being due, in part, to the need to make the "effort" to continue to practise what they had learnt. There was also a realisation about how much they had learnt had gone "out of the window" gradually over time after the course finished, accompanied by a great deal of sadness. There was a desire to have had the course continue and for some to have contact with someone "every day". The most common experience after the course finished was one of loneliness. The desire to "just be part of the world" reportedly led to external eating and the use of food as a way of getting rid of "annoying thoughts". As Cheryl put it: "If I'm fed up, I'll eat". However, there was also some evidence of being able to continue to be mindful especially when they were feeling happy and relaxed and that they were able to "remember to use" what they had learnt. As Sandeep said: "When I'm happy, I'm disciplined", and this went for most of the participants and serves to underscore the difficulties of changing a life-time habit of eating, especially if linked to meeting long-term emotional needs.

4.5.2 What does this mean in relation to other evidence and theories?

Despite criticisms from some quarters that mindfulness was never supposed to be used to overcome problems such as overeating (Harrington & Dunne, 2015), Analayo (2018) argues that mindfulness has always included teachings on weight loss. The specific teachings from Buddha are pertinent to the issues of cravings that the participants experienced. Buddhism teaches that one needs to be able to learn to recognise that desire and the urge for gratification is an impermanent state of being and is to be experienced as such. By bringing to mind the disadvantages of overeating, such as discomfort, this would allow the individual to avoid creating new experiences of old feelings of discomfort from overeating. However, there needs to be a continuity of mindfulness to allow this experience to sink in and thus reduce the cravings (Analayo, 2016). In the absence of bringing these disadvantages to mind and not avoiding them, the cycle of gratification will continue to be habitual. For example, some of the participants reported being aware sensations such as "bloatedness" was a consequence of

eating too much but this did not stop them from doing so. However, according to May and colleagues (May et al., 2012), using EIT's framework, focusing on the benefits of behaviour change will bring about more success in sustaining change rather than focusing on negative outcomes. In the case of this current study's participants, the only tangible benefits would be to achieve a target HbA1c reading or, according to Aja to "feel relieved" from low blood sugar levels. The current study exemplifies the argument to bring discomfort to mind and identifies a particular 'sticking point' for the participants which is the desire to avoid not only the emotional difficulties but to help them to bring to mind the disadvantages for them in giving in to the desire to eat particular food stuffs. This is a particular observation by the participants that it may not always be the desire to overeat, though this is reported, but to eat specific types of food items that should be eaten in moderation as part of a diabetes diet, such as chocolate and sweet things. The cravings clearly continued for these participants which, according to Analayo (2016), is due to the absence of bringing the disadvantages or uncomfortable consequences to mind when experiencing the urge to gratify their cravings. Sandeep spoke about the "poison", "bloatedness" and uncomfortable after effects, and Kevin spoke of "stabbing yourself" but this did not deter them from giving into the cravings, it just added to their guilt and disappointment with themselves. This suggests that what is needed is learning to respond to a habitual response of a desire to eat by bringing awareness to the consequences of over-eating and learning to be with the experience of craving rather than distracting oneself from it (Mason, Jhaveri, Cohn & Brewer, 2017). The course the participants attended did not focus on this particular pattern of eating nor on the need to have home practice of the mindfulness techniques which may have affected the ability to break the cycle of gratification. The other difficulty is that for many of the participants being symptomless meant that they had not experienced the consequences of eating foods that were deemed dangerous to them. This was the case for Aja who spoke of the "hidden killer" and the lack of ill-effects.

There is some recognition in the literature on the difficulties of engaging in mindfulness practices and maintaining them. For example, Miller (2017) concluded that it is not possible

to decide to live in the present moment and instantly come to realise one's state of being. It takes time, as concluded by Mason and colleagues (Mason, Epel, Aschbacher, et al. 2016) who stated: "Mindfulness may be helpful in beginning to address how to cope with the implementation of lifestyle changes that promote weight loss" (p. 91). This means addressing a lifetime of particular patterns of eating behaviours (Savoca & Miller, 2001). The various reviews and analyses of the literature have shown that mindfulness-based interventions (MBIs) can be effective in changing eating behaviours, but only if specifically targeted (Godsey, 2013; Mantzios & Wilson, 2015; Miller, 2017; O'Reilly, Cook, Spruijt-Metz & Black, 2014; Warren, Smith & Ashwell, 2017). In the case of this current study, eating behaviours were not specifically targeted which may have impacted on the findings reported here despite some evidence of participants having knowledge of what it means to be mindful when eating. For example, Marsha described how being mindful led her "to get in touch with your feelings rather than sort of spooning it in" and Aja was able to think "of what I'm eating, how am I eating" and Vea described how her relationship with food "is changing drastically" as a result of the course.

However, participants demonstrated a pattern of eating whereby they were aware that they never felt hungry but they still ate more than they reported as needing despite having the capacity to be mindful as shown above. A recent study (Annameier, Kelly, Courville, Tanofsky-Kraff, Yanovski, & Shomaker, 2018), looked at present-moment attention and whether this promotes the ability to recognise and differentiate hunger cues from other types of internal cues. The study looked at the relationship between dispositional mindfulness and eating behaviours in adolescent girls who were at risk of developing type 2 diabetes (T2D). They found that although there was a link between dispositional mindfulness and eating when not hungry, i.e. the more dispositionally mindful they were the less they ate, this was not the case if they had a reported tendency of engaging in uncontrolled eating and were hungry. This loss of control of eating, despite potentially being dispositionally mindful, is also reflected in the section on childlike behaviours where the eating reported by some of the participants was "the very opposite of being mindful". Also, it was chaotic, with Sandeep describing himself as "just

going out and pigging on something". Participants were able to reflect on times they had eaten a perfectly adequate meal or healthy one as was the case with Barbara and Sandeep but then went on to eat something they felt they should not have done. Like Annameier et al.'s (2018) study, it seems that if there is a history of a particular way of eating, then being dispositionally mindful may not be enough to change this behaviour. This therefore indicates the need for training in fostering interoceptive awareness and recognising fullness cues is required. This current study adds to these findings from a population group of PWD who have established particular patterns of eating. Finding out the pattern of eating will help determine the target behaviours. It also adds to the findings for MBIs to target interoceptive awareness and a need to know how to be with what they have become aware of, especially if it is difficult to see how not eating something will heal them. Alternatively, as shown in studies about obesity, that individuals may lose the ability to be aware of the internal sensations of satiety (Kaplan & Kaplan, 1957; Medina, Wilson, Salvo et al., 2017).

The course that the participants attended was a slightly adapted MBCT programme. This is outlined in Chapter 2 but in summary this meant there was no stipulation to do any formal mindfulness practice. Loving kindness mediation was added with little emphasis on teaching CBT skills. The findings suggest that although the participants were not diagnosed with eating disorders there was evidence of disordered eating patterns especially with Aja, Sandeep and Kevin as mentioned above. This lack of targeting these eating patterns may have had an effect on the outcomes for these participants. For example, Katterman and colleagues (Katterman, Kleinman, Hood, Nackers, & Corsica, 2014) reviewed 14 studies that used mindfulness meditations as the primary intervention for participants with subclinical eating disorders. The findings indicated that although mindfulness training was important in the fostering of positive changes in disordered eating, a standard MBSR training course does not reduce disordered eating (Kearney, Milton, Malte, McDermott, Martinez & Simpson, 2012). Therefore, this suggests that the MBI needs to be specifically focused on the eating behaviour, such as the mindfulness-based eating awareness training (Kristeller & Wolever, 2011). It has

also been suggested that although there may be merit in targeting particular groups who have similar eating patterns (Breland et al., 2016; Timmerman & Brown, 2012), deciding which eating behaviours or patterns to target is complex as there is a range of eating behaviours in the literature that this study adds to that may be problematic to PWD. These include: overeating, binge-eating and eating disorders; night time eating; eating alone; mindless eating and cravings (Carter & Jansen, 2012; Castro-Sanchez et al., 2013). There is also evidence of eating to regulate emotions, possibly due to insecure attachment issues or due to a lack of interoceptive awareness (Alexander & Siegel, 2013; Warren, Smith & Ashwell, 2017). There is also the potential lack of self-compassion, negative thoughts and feelings of shame (Gilbert, 2010).

A mindfulness programmes for PWD (Miller, Kristeller, Headings, Nagaraja & Miser, 2012; Miller, Kristeller, Headings & Nagaraja, 2014) was compared with a diabetes self-management programme with a mindful eating programme designed for PWD. The hypothesised outcome was that mindful eating would facilitate greater food regulation by minimising overeating and reduce inattentive eating and overeating. The findings that are pertinent to this current study were that healthy eating tended to happen when there was an awareness that the internal sensation was not hunger, and that unhealthy food tended to be eaten in response to emotional cues. The current participants showed evidence of similar patterns of unhealthy eating, as already discussed, and this highlights the importance of bringing awareness to the emotional sensations which the participants also found difficult to respond to differently.

There is evidence from this study that for some of the participants, the continued use of mindfulness techniques was only possible when they already felt good. This was evident in Cheryl's account of having a well-balanced diet when in a good place and Jacinta reporting that when she is being more conscious, she will reduce her intake. This is in contrast to Mantzios and Giannou (2014) who suggested that without the structure of a group session,

individuals tend to use mindfulness meditations when things were not going well making it an avoidance practice. However, when the current participants felt bad, some reported they fell into old habits of eating, which they said worked better and quicker than mindfulness. It has already been noted with these participants that they had developed the recognition of hunger signals and reported that they were aware that they rarely felt hungry but felt the urge to gratify their desires to eat particular items of food. This difficulty could be due to problems with individual practice where failure in using some of the mindfulness meditations could enhance the inclination to avoid and therefore be unable to remain open to whatever arises in the moment. There is also some evidence that doing mindfulness meditations on one's own, especially as a beginner, may not be conducive to supporting a mindful attitude when there is a felt sense of failing (Mantzios & Giannou, 2014). The sense of failure is often present in people who are overweight due to failed diets, or being unable to reduce or give up favourite foods (Medina, Wilson, Salvo, et al., 2017). The idea of bearing the suffering of negative thoughts and the urge to eat something without someone guiding them may be difficult to grasp. Tapper, Shaw, Ilsley et al. (2009) also reported some findings that suggest participants found it difficult to understand the acceptance part of the ACT programme being used. They confused the aim of the acceptance exercise with relaxation, not unlike the participants of this current study. This particular finding of the current study adds to Tapper and colleagues' study (Tapper et al. 2009) and was consistent with a lack of change in emotional and external eating or psychological flexibility.

What seems to come out of this current study is that little consideration was given to how the participants got to where they were in relation to food in terms of the *how* and *why* of eating prior to the course. Although the course provided to these participants was specifically for PWD, eating behaviours were not targeted other than in the initial raisin-eating exercise in the first session. They were also not encouraged to practise the mindfulness exercises for fear of exacerbating rigidity and a sense of failure. However, the consequence of this may have perpetuated the tendency to avoid difficulties and use food to self-soothe instead.

4.6 Quality and research rigour

Yardley's (2000) paper on ensuring validity in qualitative research is the main text used to consider the quality and research rigour in this section. In terms of the completeness of data collection, analysis and interpretation, I include a section on the limitations of the study. With regards to whether the research is important, I address some of its potential implications of in practise and future research. I conclude this section with a professional reflexive piece to address the sensitivity in context and a personal reflexive piece to address my own interests and motivations.

4.7 Limitations of the study

These findings are subject to various limitations of the study as a whole. The course, and how it was taught, and the length of time since the course ended will have some bearing on participants' reported experiences of being mindful at the time of the interviews. The quality of the MBI instructor is also an important aspect of the effectiveness of the programme (Crane et al., 2017; Daubenmier et al., 2016).

One of the main limitations of this research was the potential influence of the varying times between the participants of when they had completed the mindfulness course. There is very little data on the long-term effects of a mindfulness course however, there is some evidence that certain facets of mindfulness have been shown to have continued effects over a two-year period (Petrocchi & Ottaviani, 2015) and six years (de Vibe, Solhaug, Rosenvinge et al., 2018). Following a course in Mindfulness Based Stress Reduction (MBSR) course with medical and psychology students in Norway, De Vibe and colleagues (2018) found a sustained effect on the coping skills and dispositional mindfulness compared to a control group, despite poor to moderate adherence to formal mindfulness practice suggesting that a mindful attitude can be relatively stable disposition. However, this leaves the potential for a different set of results if the interviews had taken place within a few months of undertaking the training rather

than a few years. The intervention itself and the quality of the instructor should also be taken into consideration as a limitation.

The intervention was an MBCT programme which was slightly modified for PWD. Although the lack of promoting formal homework practice was justified as a way of preventing a sense of failure, they were encouraged to do something mindful every day. The literature does indicate that progress is linked to the formal practice (Birtwell, Williams, Marwijk, Armitage & Sheffield, 2018; Crane, Crane, Eames et al., 2014). Therefore, this may have affected the degree to which change in mindfulness was achieved. The course did not target eating behaviours, apart from using the raisin exercise at the beginning, nor how to restructure eating in order to avoid extreme fullness or hunger. It did however include loving kindness mediations which is in keeping with the literature around shame and self-blame (Neff & Dahm, 2015). As indicated by the literature review and in this discussion chapter, there is a need to increase self-compassion and interoceptive awareness, specifically with cravings and overeating in response to difficult emotions. It was unclear how much this was addressed but if it followed the generic MBCT course as indicated, then this may not have been a focus of the interventions used. The studies on mindfulness have shown that specificity of targets is required rather than generic courses if particular behaviour changes are indicated (Kristeller & Wolever, 2011). The potential targets for helping PWD improve self-management are varied and this study has shown that there are a number of potential influencing factors, such as elaborations of intrusive thoughts, which suggests the need to attend to interoceptive awareness as the potential drivers for cravings. There is also the isolation and loss that may make it difficult to continue practising mindfulness after the course on their own (Mantzios & Giannou, 2014) The teacher did provide drop-in sessions but the participants reported the need for more. It could be argued that maybe the regular format of MBCT is not long enough or specific enough for the needs of PWD.

The instructor had her own personal practice which is important as the embodiment of the attitude of mindfulness is crucial to the learning process (Boudette, 2010; Crane, Brewer, Feldman et al., 2017). She was not at the time registered on a UK listings which since 2017 is there to demonstrate that they have met the guidelines (UK Network for Mindfulness-Based Teacher Training Organisations, 2019). This has been a recent recommendation for all teachers to ensure the maintenance of standards and to protect the public. She was, however, trained in understanding diabetes and the nature of problems associated with managing this and had a number of years in meeting the psychological needs of PWD in the diabetes clinic where she was based. This understanding is seen as necessary for running groups for specific segments of the population (Crane, Brewer, Feldman, et al., 2017).

The ratio of males to females with diabetes is 1 and in this study the ratio of females to males was 3:1. This may be because females are more attracted to MBIs than males (Goldstein, 2014), so this ratio may well reflect the reality of the ratio of those attending mindfulness courses generally. Using IPA methodology means the findings are not generalisable to the whole population of people with diabetes, and the small sample was recruited from a specific intervention.

4.8 Strengths and implications for clinical practice

As counselling psychologists, we should be practising from an evidence-based position and promoting diversity in research methodologies, such as the qualitative methodology utilised in this study (Cooper & McCleod, 2007). One key difference between the research literature and this current study is that this study focuses on a population where participants do not necessarily have a diagnosable eating disorder but who do have issues with eating, potentially low moods and anxiety. These are the people that we are more likely to see at a primary care level. The research to date has mainly focussed on clinical and hospitalised populations with diagnosed eating disorders. One of the strengths of this study is that the

current participants, whilst accepting that this information was not requested, are potentially part of the regular population of people with type 2 diabetes who do not have an eating disorder and are feeling exposed to societal stigma about being overweight (in most cases) and yet are left to self-manage a potentially debilitating long-term condition.

However, something more fundamental has emerged from this study that questions the approach currently used to provide interventions aimed loosely at improving an individual's ability to self-manage diabetes. To be able to be self-managing requires the freedom from anxiety and avoidance behaviours, and to be secure within oneself. To be mindful also seems to require such a state, so the question is which comes first? The experiences of these specific individuals and how they found it difficult to continue practising mindfulness techniques after the group, which in this case could be identified as a secure attachment, seems to suggest that being able to have a mental representation of a supportive secure figure may prove necessary to fully benefit from an MBI. The group seemed to serve this purpose, but maintaining it as a mental representation was difficult, especially when distressed. Participants have reported that eating something they know is bad for them is quicker and easier than "doing mindfulness".

Armstrong and Roth (1989) highlighted how this potential separation anxiety from the group needs to be considered with regards to the ending of therapy and the difficulties this may present to those with attachment insecurity. It may reinforce beliefs that they may hold about the "nonviability of long-term intimate relationships" (p. 153, Armstrong & Roth, 1989). This may need to be considered in future as the risk for the group becoming the only attachment figure in their lives may make the mindfulness work limited to the eight weeks they spend together when they feel a sense of safety and support. Conversely, the use of that security of the group theoretically may help develop the openness to experiences that comes from being mindful. If mindfulness courses are targeting issues that are closely associated with anxious or avoidant attachment patterns, such as eating behaviours, then it may be that the

focus should be on the ability to establish mental representations of the immeasurable conditions of loving kindness, equanimity, compassion and empathetic joy (Wallace, 2004). Individuals, such as the participants in this study, may at first need to be instructed to think about their most recent supportive experience in order to counter the tendency to perhaps doubt that there is any available responsive attachment figure (Mikulincer & Shaver, 2001). Meredith and Strong (2019) suggested a more integrated approach tailored to individual needs and taking on the central role of attachment. Regulating stress due to insecure attachment could be achieved through mindfulness and would also bring increased awareness to sensory stimuli and modulate them accordingly. Key targets would therefore be to reduce emotional control and increase awareness of emotional states. Insecure attachment is also associated with how one relates to health providers, so improving patient-provider relationships could optimise chances of improved self-management. This may also indicate the inclusion of attachment theory to instructors of mindfulness.

The mindfulness strategies utilised in tackling certain behaviours or psychological states should therefore be targeting particular components or maintaining factors of the problem. A few studies have looked at these strategies and attempted to isolate them to determine if they have an effect on the particular problem being targeted. Tapper (2017) reviewed 19 studies of mindfulness programmes aimed at weight management-related eating behaviours. She concluded that although specific mindfulness techniques, in particular present moment awareness and decentring, showed most promise in targeting weight management, unless research is informed by theory, we will not be able to fully understand what works and why. What appears to be occurring may have more to do with targeting functional problems with people who have difficulties with self-management. These difficulties may need to be identified on an individual basis above and beyond the shared difficulties that have been addressed here.

This knowledge would seem essential if MBIs are to be continued to be used as evidence-based interventions for not just those with difficulties in managing their diabetes but many other conditions or problems. What is being offered in this study is the suggestion that there needs to be some preliminary work or focus on being able to develop a felt sense of security. It is of interest that mindfulness was enthused about by Vea who rediscovered her religious and spiritual beliefs. It could be said that her belief in God provided her with the mental representation of a security-enhancing figure that she was able to bring to mind in difficult times. This in turn may well have enabled her to be able to act in mindful ways that the other participants seemed to have reportedly found difficult to do.

This study opened up a window to the experiences of conflict between finding peace with mindfulness, but not being able to make full use of their learning in relation to their eating behaviour. It also created conflict with craving certain foods and hating them too, to conflict with searching for childlike comfort and falling into, what I have interpreted as, behaving like insecurely-attached children when it came to eating what they wanted, when they wanted. All of these difficulties and conflicts could be the target for mindfulness strategies, but some understanding from the literature as to how these behaviours and conflicts could be contributing to difficulties with food need to be examined further. For example, if the difficulties with self-management are because it is hard to get comfort from anywhere or anyone else or there are anxious or avoidant attachment styles in operation, then this points to developing effective emotional regulation and perhaps being much more in tune with the body as a source of information (Miller, 2017; Telch, Agras & Linehan, 2000). This would also indicate a need to focus much more on the body as a tool. Body psychotherapy (Totton, 2003), Body Awareness Therapy (Ryding, Rudebeck & Roxendale, 2002) or Body Awareness Program (Landsman-Dijkstra, van Wijck & Groothoff (2006) may help to improve participants' relationship with their bodies and learn to distinguish between what is happening in their bodies from what they think is happening in their bodies. This may involve correcting an individual's narrative to reflect the biological reality (Rogers & Brunstrom, 2016). If, as it has been suggested, the loss of an

attachment figure is unresolved, this may require a degree of acceptance, a felt sense of security or a new internal model of secure attachment before any more work is done as a first step.

One aspect that needs careful consideration is making any interventions not only specific for what the individual needs but to make the intervention acceptable and not something that makes someone feel even more stigmatised than they may already feel. Perhaps a course that is promoted as focussing on eating and food intake needs to be rethought in light of the current stigmatising narrative on obesity (Ralston, Brinston, Buse, et al., 2018).

4.9 Implications for future research

It is hoped that this research can stimulate further research into the everyday lives of the millions of people trying to manage their diabetes. A number of studies have begun to isolate the components of mindfulness that have an effect on behaviours and attitudes. Future research within the field of diabetes could strengthen evidence for specific facets of mindfulness related to eating behaviour. However, it needs to be kept in mind that attachment difficulties may result in problems in making cognitive distinctions between separations that were everyday short breaks and those that are permanent breaks (Armstrong & Roth, 1989). Therefore, amongst insecure attached adults, there is an over-sensitivity to separation which, according to Ainsworth et al. (Ainsworth, Blehar, Waters & Wall, 1978), is in keeping with an anxious attachment style. If, as this study suggests, a felt sense of security needs to be developed as part of the intervention then this may help to allow a continuation of the benefits gained from mindfulness courses long after they finish. The ability to understand the mental state of self and others, could be examined as potentially helping someone to mentalise the mind of others when apart from a social group such as a mindfulness group. A mixed-methods study utilising measures of the participants' attachment style, mindfulness disposition and the

ability to mentalise could help to establish what the mediating factor is in improved facets of mindfulness as measured following a course.

Research is also needed that reflects the culturally-diverse demographics and the presenting issues of the population who have T2D. This requires ensuring that the ethnic mix reflects the true picture of diabetes across the country given the higher rates of T2D in South Asian and African, Africa-Caribbean population. There is also a need to shift from research that is mostly focussed on clinically disordered eating patients to those who struggle with the real-world, everyday lived experiences of food.

4.10 Reflexivity

4.10.1 Professional reflexivity

My background in developmental and health psychology has clearly influenced the way I have interpreted the experiences of the individuals I interviewed and in a way that was unexpected. I had not fully considered that my background would have been a source of information in the interpretation process and the difficulties of bracketing this off, or epoché. As Finlay and Gough (2008) pointed out, epoché is not an attempt to be objective but one of being reflexive on the potential impact I as the researcher had on the research process. I kept a reflective journal in which I wrote straight after the interviews to note my impressions of the interviewees in an attempt to stay reflexive. I also ensured that I had regular supervision as I progressed through the interviewing period and during the analysis stage. I was very conscious of the positivist attitude of my previous research experiences and the draw to look for certainty. I was also bringing my own experiences of running a mindfulness course for PWD in my own workplace which is where I first came face to face with the potential issues that this research has explored. We had provided a course for PWD based on treating the depression and anxiety of living with diabetes but with little effect on this. However, we had seen an improvement in their self-care. As a novice IPA researcher, the most difficult aspect was to step back and let the words and experiences of the participants to speak for themselves.

I managed this process by firstly running a pilot study with a colleague at work who did not have diabetes, but was a mindfulness teacher in training. This gave me an insight into the interview process and potential difficulties of asking personal questions and what it might imply. I was aware of potentially coming across as judgemental and the pilot study had the effect of changing the approach I took with the participants, such as leaving space for them to talk and to check out any assumptions I may be making in my questions. It made me much more sensitive to the issues of stigma that may be attached to having diabetes and I tried to be careful with the wording of the questions and how I was with them in the interviews. The pilot gave me an opportunity to experience the analysis process and the feeling of being disloyal to the interviewee when I moved into the critical analysis. I noticed with interest how my preconceptions about my colleague were asserting their influence on my interpretations. I reflected on this in the assignment the pilot study was used for. Positioning myself in this way and developing the stance of making tentative interpretations has had an effect on my clinical practice too. I have noticed that I am able to let the clients speak more freely and to not jump in with my assessments of what they need or what is wrong with them. I am more likely to be open to their lived experiences and not assume I have a shared understanding of what they are experiencing.

4.10.2 Personal reflexivity

The experience in the interview room with the participants felt like a privilege and I had not appreciated at the beginning of this process just how much a relationship with food would bring out a certain relationship with perhaps themselves let alone others. As the only other person in the room with the participants, my position seemed to feel like it varied from the experience of hearing confessions to perhaps feeling almost parental. I am aware that these personal experiences of mine are part of the data and as such make this data a shared experience where my role and my personality and the effect it was having on me was part of their experience too.

I had not consciously held *a priori* theories of how someone may relate to food whilst dealing with diabetes. What surprised me more than anything was the sense of sadness that came from most of the participants. The fact that this was within the narrative of their struggles with food and relating it to difficulties in childhood no doubt turned my thoughts to my mother's experiences with diabetes. I was in most cases very conscious of the sadness that came from talking about the experiences I was questioning them about. Many of them commented on how surprised they were too at what it brought up for them and that they were making connections that they had not thought of before. Some felt that they needed to contemplate some of their discoveries further after talking with me. I think that although I had a plan of the questions that I used to guide the conversation, the ability to provide an accepting and non-judgmental attitude helped to provide the much-discussed temporary felt sense of security or conditions of worth (Rogers, 1961) that perhaps enabled most of the participants to talk, and to talk perhaps freely.

4.11 Conclusions

Eating food is a behaviour consistent with feeling hungry and this need is met through satiation. However, as is the case with all of the participants in this study, hunger was not and has rarely been the drive to eat. Therefore, the natural reward of food in response to hunger is not experienced. It was more likely to be the reported experience of food giving 'love' or to stop them from 'doing stupid things' or 'screaming', and often it was to fulfil a need for comforting and meet the yearning and cravings. Food, in the reported experiences captured in this study, has therefore taken on a different role and is reportedly very tied to the experience of the body and the ability to bring about good feelings, or the avoidance of unpleasant funny spells and annoying thoughts. This has led to the consideration of the function of the relationship with food being based in desire and the EIT (Kavanagh et al., 2005). This cognitive theory fits with the research on using mindfulness and imagery as a way of utilising the limited working memory and therefore reducing the desire to eat certain food as a way of achieving a particular state. Memory, and in particular childhood memories, were reported to be particularly

important in the relationship with food in this current study. This linked the research to something even more fundamental to cognitions which is the research on attachment and emotional regulation and the role it plays with how food is used.

There is also a need to target the shame and self-blame that PWD are subject to as reviewed in Chapter 1. A recent commentary in *The Lancet* called for a change in the narrative used in relation to people who are obese in order to ensure that we can address the 'complex interplay between factors that are not within individuals' control' (p.1385, Ralston, Brinston, Buse et al., 2018), They particular recognise the need for the lived experience of the individuals to be at the centre of the narrative 'so that a better, more accurate story can be told'(p.1385). Without this shift the issues of obesity will continue to stigmatised with siloed approaches.

If PWD struggle emotionally because of years of coping with an insecure attachment style, then care needs to be taken to make sure the interventions meet their particular needs. The literature indicates that the ability to mentalise is part of a secure attachment style. Mentalising is a core aspect of mindfulness and it raises the issue of whether we are doing this particular group of people a disservice by sending them on a course that they may not be able to make full use of. One way of addressing this issue would be to provide a mentalising intervention prior to a mindfulness course for those who have an insecure attachment style. This emphasises the need to develop models to understand and influence patients with chronic illnesses from perspective of attachment, as a shift in attachment style may be directly related to capacity to adhere to regimen of diabetes. It is the psychological factor activated by stress of illness and the way people relate to others who care for them which needs to be addressed.

Mindfulness courses clearly have a role to play in helping people with diabetes. The increased awareness of what the participants were doing when it came to food was clear, although painful. Learning to have more self-compassion through loving kindness was particularly noted with the participants. By slowing down through mindfulness, you become more connected to yourself and a sense of safety, rather than a need to be safe. However, as

Gilbert (2010) has noted, compassion is about going out and facing one's fears rather than sitting inside eating chocolate. Food was often the preferred option to mindfulness exercises and this may be due to a lack of encouragement for formal practice potentially leaving the participants with a sense of failure. Mindful eating research has also shown to help but in keeping with the observations made here, if mindful eating is not specifically targeted then the *how* of eating is left unaddressed. Food for some participants has been the one reliable relationship in participants' lives, so a sense of security within themselves is needed before attempting to change it. For other participants food is an unwanted and unreliable relationship thus requiring the ability to learn to trust their bodies and know what the internal experiences mean and respond accordingly. Feeling empty is not the preferred alternative but if they could be helped to develop new relationships and mentalise a felt sense of security, then maybe they will not feel quite so emotionally empty.

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APPENDICES

List of Appendices

Appendix A: Semi-Structured Interview Schedule

Semi-Structured Interview Schedule/Topic guide

General Questions:

Can you describe your relationship to food as you were growing up? (the role it played in family life? Any associations you had in relation to food?)

Can you tell me how your relationship to food is influenced by having diabetes?

e.g.*What was the effect of having diabetes on your eating? Buying? (food choices?) cooking? Number of times you eat during the day? Meals or snacks?*

Can you describe the impact diabetes diagnosis had on your life?

Prompt: food, work, family, relationships, activities,

Food – mindfulness – difficulties (get concrete descriptions of experiences)

Have you changed how you eat? Can you give me an example?

How do you experience hunger and eating? What was it like before you had diabetes? What was it like after doing the mindfulness course?

Can you tell me what you go through when you decide to eat something? Can you give me a recent example of this? (is it at set times? In response to physiological need or emotional needs eg When hungry? When upset? Tired? Looking at carbs? Sugars? Calories? Taste?)

Can you tell me what kind of feelings are triggered in you when you think of food? (any particular type of foods that do that?)

Can you describe the last time you encountered any dilemmas with food because of your diabetes? (what was the dilemma?e.g. *eating out? Buying food? Travel? Meals with others at home or out?* Consequences of dilemma? How was it managed? What could have been done to prevent the dilemma?)

Having done a mindfulness course, can you tell me about any impact this had on your relationship to food?

Can you think of a recent example of when you used mindfulness in relation to diabetes or food or both?

When you bring to mind the last time you ate or drank anything can you describe the experience you went through? If you did not apply mindfulness to this particular experience how do you think it would have been different if you had?

Appendix B: Peer Review document

[redacted]TH NHS TRUST PEER REVIEW FORM

Please complete all sections of this form that are appropriate to your application.

N.B. Section 7 must be completed and Section 8 signed by R&D Office before submission to the relevant Peer Review Committee.

1. Full Project Title: (The project protocol or specification must be attached to this form)		
How do people experience living with diabetes following a course in mindfulness?		
2. Short Title:		
3. Investigators	**Name**	**Department**
(a) Principal Investigator (For External Sponsors)	Joelle Brogan	Psychology, SASS, City University, London
(b) Principal Investigator (For Internal Reporting)		
(c) Co-Investigator		
(d) Co-Investigator		
4. Application Details		
(a) Funding Body	N/A	
(b) Application close date	N/A	
5. Approvals, Space & Facilities	**COMMENTS – please answer *at least* YES or NO**	
(a) There is adequate space to carry out the project effectively	yes	
(b) Where applicable BSU have authorised costs	Yes	
(c) Human Ethics - Does this project involve the use of questionnaires/surveys, access to medical or other personal records, investigations into human behaviour, routine testing of human subjects, administration of drugs, vaccines or any experimentation?	yes	
(d) Animal Ethics - Does this project involve the use of animals?	no	
(e) Biosafety - Does this project involve Genetically modified organisms or hazardous organisms?	no	

1

Appendix C: Participant Information Sheet

CITY UNIVERSITY LONDON

[redacted] NHS Trust

Title of study: 'How do people with Type 2 diabetes experience their relationship with food following a Mindfulness course?'

I would like to invite you to take part in a research study. Before you decide whether you would like to take part it is important that you understand why the research is being done and what it would involve for you. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

This research is part of a Doctorate in Psychology at City University and will be written up in a thesis as part of the qualification in Counselling Psychology. By taking part in this research you will be giving me valuable information on what it is like to live with a lifelong condition and in particular with diabetes. One thing I would like to understand is, what it is like to live with diabetes following an intervention designed to improve self-care, in this case Mindfulness? By agreeing to be interviewed and recorded I can look more in-depth at the ways that people with diabetes talk about their experiences following such a course. If this is possible then it might help me to discover what are the most difficult experiences that services and psychologists could be helping you with and this in turn will help me to figure out how they can improve their help.

Why have I been invited?

All patients with Type 2 diabetes who have participated on the Mindfulness Course for Diabetes at [redacted] Diabetes Care Clinic have been asked to participate in this research.

Do I have to take part?

Participation in the project is voluntary, and you can choose not to take part at all. If you decide to contribute but change your mind at a later stage you can withdraw at any time without having to give a reason and this will not affect the treatment or services that you receive at the Clinic. However, once the research is published you will no longer be able to withdraw your contribution.

If you do decide to take part you will be asked to sign a consent form.

What will happen if I take part?

- You will be involved for the duration of the interview only.
- The research study is due to be finished by September 2017.
- The interview will last approximately 60-90 minutes and will be recorded.
- You will be asked some personal information about yourself and about having diabetes.
- Your interview will be transcribed and analysed for the main themes that arise for you.
- The interviews will take place at [redacted] Diabetes Care Clinic.

What do I have to do?

You will be asked a number of questions designed to allow you to talk openly about your experience of having diabetes. All you need to do is answer the questions as best as you can giving as much detail as possible. If at any point you do not wish to answer a question or carry on you are free to withdraw.

What are the possible disadvantages and risks of taking part?

You may experience some negative feelings if you have experienced some difficult times with your diabetes. I will be able to give you contact details of the Clinical Psychologist who ran the Mindfulness Course that you attended originally who will be able to help you work through any difficult feelings that may come up for you if you wish to get some help with them.

What are the possible benefits of taking part?

This research aims to provide an enhanced understanding of what it is like to live with diabetes, and in particular what ones relationship to food is like following a course in Mindfulness. This understanding may benefit patients by informing a more tailored approach to care.

What will happen when the research study stops?

All recordings will be made on a digital recorder which encrypts the recording making it impossible for it to be downloaded or copied without the relevant software and licence. The data and recordings will be kept until the end of the research. After which the recordings will be erased and any paper records will be destroyed.

Will my taking part in the study be kept confidential?

- *Only I will have access to the data you provide which will be given a unique identifying code.*
- *Audio recordings will be saved on an encrypted recorder for the purposes of meeting the requirement of the Doctorate after which period will be erased.*
- *No identifying data will be made available to any other persons.*
- *Data will be kept for the purpose of the Doctorate and then destroyed.*

- *Confidentiality will be assured except in the event of reporting of violence, abuse, self-inflicted harm, harm to others, criminal activity.*

What will happen to the results of the research study?

The results of this study will be reported as part of a Doctoral thesis and as such will be available to the public. There may be the possibility of further future publications in academic journals relating to psychology and/or diabetes. All participants quoted in the thesis/publications will be anonymised.

What will happen if I don't want to carry on with the study?

You will be free to withdraw from this study at any time up until the study is published without having to give any explanation. This will not affect any ongoing care medical or otherwise.

What if there is a problem

If you have any problems, concerns or questions about this study, you should ask to speak to either myself or my supervisor. Contact details are below. If you remain unhappy and wish to complain formally, you can do this through the University complaints procedure. To complain about the study, you need to [redacted] You can then ask to speak to the Secretary to Senate Research Ethics Committee and inform them that the name of the project is: *'How People Experience Living with Diabetes following a course in MBCT'*

You could also write to the Secretary at:

[redacted]

Secretary to Senate Research Ethics Committee

Research Office, E214

City University London

Northampton Square

London

EC1V 0HB

[redacted]

City University London holds insurance policies which apply to this study. If you feel you have been harmed or injured by taking part in this study you may be eligible to claim compensation. This does not affect your legal rights to seek compensation. If you are harmed due to someone's negligence, then you may have grounds for legal action.

Who has reviewed the study?

This study has been approved by City University London Research Ethics Committee, PSYETH (P/L) 15/16 275 and by Berkshire B REC (IRAS ID: 213120).

Further information and contact details

[redacted]

Thank you for taking the time to read this information sheet.

Appendix D: Participant Recruitment Advert and Letter

CITY UNIVERSITY LONDON

[redacted] NHS Trust

Department of Psychology
City University London

PARTICIPANTS NEEDED FOR RESEARCH INTO HOW PEOPLE WITH TYPE 2 DIABETES EXPERIENCE THEIR RELATIONSHIP WITH FOOD AFTER ATTENDING A MINDFULNESS COURSE

We are looking for volunteers to take part in a study on what the experience is like to live with diabetes, in particular what your relationship with food is like and how a Mindfulness course affected this (or not!).

You would be asked to:

Answer a few questions about your experience of having diabetes and

What your relationship to food is like.

Your participation would involve one individual session, for approximately 1 hour.

For more information about this study, or to take part, please contact:

Joelle Brogan

Psychology Department, City University London
at
[redacted]

This study has been reviewed by, and received ethics clearance
through the Berkshire B Research Ethics Committee and City University London
PSYETH (P/L) 15/16 275

Created on 4/01/2017 Version 2

CITY UNIVERSITY LONDON

[redacted] NHS Trust

Dear (Participant)

You are invited to take part in a study to ask you a few questions about your experiences of living with diabetes.

Dr. [redacted] from the Diabetes Clinic at [redacted] Hospital has very kindly agreed to send out this letter to you on my behalf because you have completed the course she has been running on Mindfulness. My name is Joelle Brogan and I am Trainee Counselling Psychologist undertaking a Doctorate in Counselling Psychology at the City University of London. As part of the course I am conducting a piece of research and I am particularly interested in how people with Type 2 diabetes experience their relationship with food following a Mindfulness course, which is where you come in, and I would therefore like to invite you to take part.

By taking part in this research you will be giving me valuable information on what it is like to live with a lifelong condition and in particular with diabetes. One thing I would like to understand is, what it is like to live with diabetes following an intervention designed to improve self-care, in this case Mindfulness? By agreeing to be interviewed and recorded (it will take about 60 minutes) I can look more in-depth at the ways that people with

diabetes talk about their experiences following such a course, whatever that experience is. If this is possible then it might help me to discover what experiences that services and psychologists could be helping you with and this in turn will help me to potentially provide suggestions about how they can improve their help.

The interviews will be done at a time convenient for you at the Diabetes clinic at [redacted] [redacted] Hospital. This is all I would require from you so I sincerely hope you will consider my invite and contact us very soon.

Of course this is totally voluntary and you are under no obligation to participate and if you choose not to participate this will not affect your on-going treatment at the Clinic. If you do decide to participate you will be given further information and a consent form to sign.

Yours sincerely,

Joelle Brogan [redacted]

Trainee Counselling Psychologist Clinical Psychologist

Research application reviewed by Berkshire B Research Ethics Committee.

Appendix E: Consent Form

CITY UNIVERSITY LONDON

[redacted] NHS Trust

Title of Study: How do people with Type 2 diabetes experience their relationship with food following a Mindfulness course?

Ethics approval code: PSYETH (P/L) 15/16 275. IRAS ID 213120

Please initial box

1.	I have had the opportunity to ask questions and had them answered satisfactorily.	
2.	I agree to take part in the above City University London research project. I have had the project explained to me, and I have read the participant information sheet, which I may keep for my records. I understand this will involve: • being interviewed by the researcher • allowing the interview to be audiotaped	
3.	I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published. The identifiable data will not be shared with any other organisation.	
4.	I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalized or disadvantaged in any way.	
5.	I give permission for direct anonymised quotes from my interview to be used.	
6.	I agree to take part in the above study.	

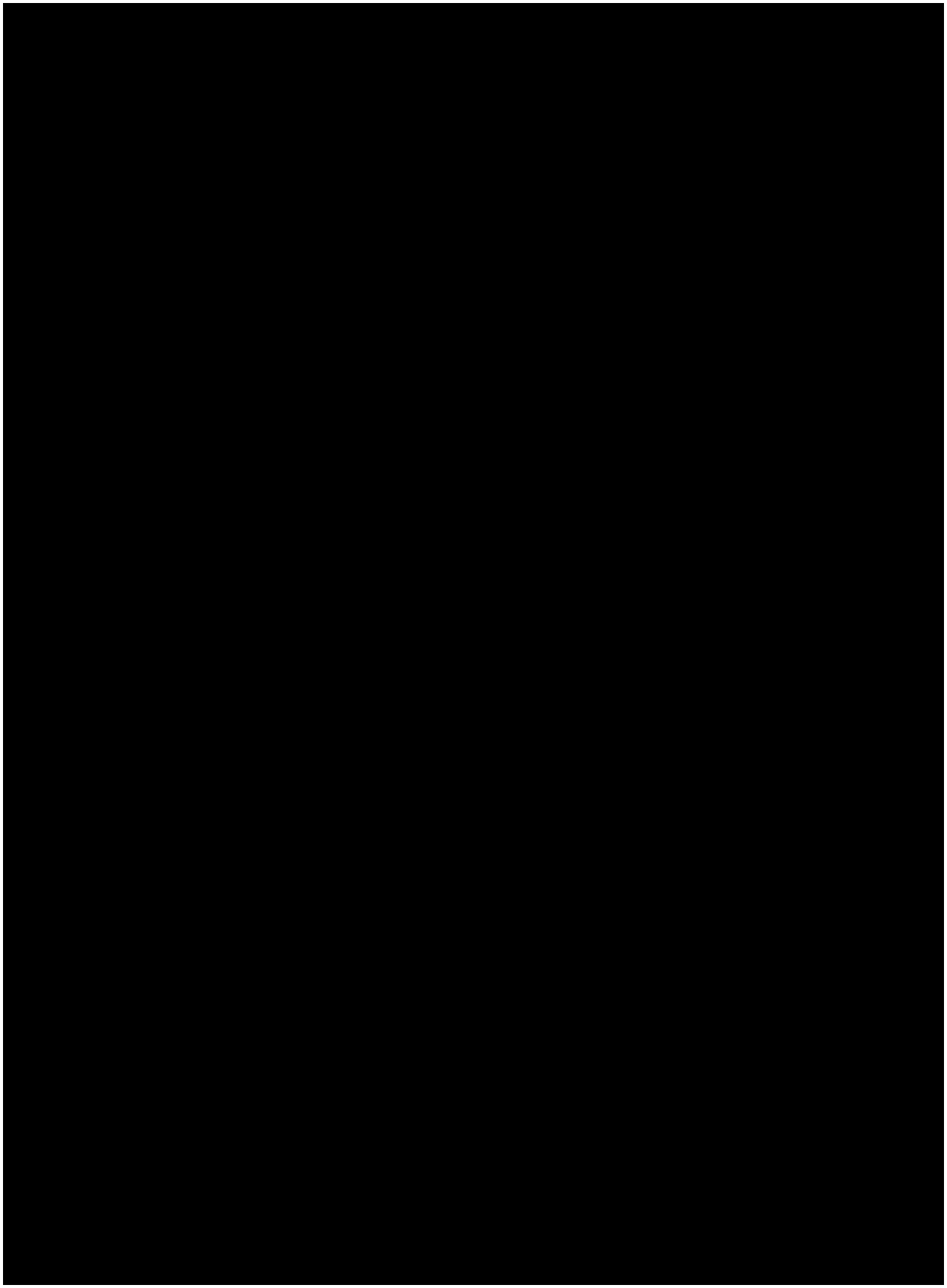
_____	_____	_____
Name of Participant	Signature	Date
_____	_____	_____
Name of Researcher	Signature	Date

When completed, 1 copy for participant; 1 copy for researcher file.

Note to researcher: to ensure anonymity, consent forms should NOT include participant numbers and should be stored separately from data.

Appendix F: Sample of Steps 2 and 3 coding

Appendix G: Using Post-its to arrange into Master Themes



Appendix H: Table of Master Themes

Master Themes

From kindly self-harm to feeding a passion

1. Stabbing self in the heart/ feeding a passion
2. Food will kill me because I hate it/seduced by dangerously beautiful food
3. Its killing me inside/sugar is the medicine I need
4. I used to grab the biscuit tin but now I open the bible/pleasure had in filling up stomach
5. Food is trouble indoors/food would work if it wasn't for the guilt
6. Obliteration of any good feelings toward food/food means love and I need lots of it
7. Constant vomiting and wiping out foods/if I'm fed up I'll eat
8. I'd rather have a pill than eat/food used to be blissful so much lovely choice

What has mindfulness ever done for me?

1. Fuck off mindfulness/peace in my heart always there
2. Mindfulness is a forgotten experience/mindfulness woke me up to food and eating behaviours
3. I can't be mindful with tunnel vision/good mood means conscious eating
4. Engaging and thinking deeply about food is painful and too much/good food is not a comfort
5. Awareness of thoughts means I am ok/eating works better than mindfulness at getting rid of annoying thoughts
6. Mindfulness makes me aware of triggers/mindfulness is an interruption to my day
7. Eating is no longer about how I feel/self-guide has moved from stomach to head

From needy child to undisciplined child

1 Mother was replaced by food/I was eating to keep my mother alive
2 Craving for childhood memories/food is part of a deeper turmoil it's not me being a pig
3 If I've been naughty I try to be good/I don't keep food in the house
4 Comfort sought through taste of childhood/easier if you are a cripple then you can just get on with it.
5 Childhood re-enacted is comforting/chaotic feeding when steady care gone
6 Need someone else to feed me/I can't be trusted with food

Appendix I: City University Ethics letter of approval

CITY UNIVERSITY LONDON

Psychology Research Ethics Committee
School of Arts and Social Sciences
City University London
London EC1R 0JD

31st August 2016

Dear Joelle Brogan [redacted]

Reference: PSYETH (P/L) 15/16 275
Project title: How do people experience living with diabetes following a Mindfulness course?

I am writing to confirm that the research proposal detailed above has been granted approval by the City University London Psychology Department Research Ethics Committee.

Period of approval
Approval is valid for a period of three years from the date of this letter. If data collection runs beyond this period you will need to apply for an extension using the Amendments Form.

Project amendments
You will also need to submit an Amendments Form if you want to make any of the following changes to your research:

(a) Recruit a new category of participants
(b) Change, or add to, the research method employed
(c) Collect additional types of data
(d) Change the researchers involved in the project

Adverse events
You will need to submit an Adverse Events Form, copied to the Secretary of the Senate Research Ethics Committee [redacted] in the event of any of the following:

(a) Adverse events
(b) Breaches of confidentiality
(c) Safeguarding issues relating to children and vulnerable adults
(d) Incidents that affect the personal safety of a participant or researcher

Issues (a) and (b) should be reported as soon as possible and no later than 5 days after the event. Issues (c) and (d) should be reported immediately. Where appropriate the researcher should also report adverse events to other relevant institutions such as the police or social services.

Should you have any further queries then please do not hesitate to get in touch.

Kind regards

[redacted]

Appendix J: HRA letter of approval

NHS
Health Research Authority

Ms Joelle Brogan
Dept of Psychology, SASS,
City University, Whiskin Street,
London
EC1R 0JD

[redacted]

05 January 2017

Dear Ms Brogan

Letter of HRA Approval

Study title:	**How do people with Type 2 diabetes experience their relationship with food following a course in mindfulness?**
IRAS project ID:	**213120**
REC reference:	**16/SC/0648**
Sponsor	**City University London**

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

Participation of NHS Organisations in England

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

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

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

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

It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details

Appendix K: REC letter of approval

[redacted]

Please note: This is an acknowledgement letter from the REC only and does not allow you to start your study at NHS sites in England until you receive HRA Approval

04 January 2017

Ms Joelle Brogan
Dept of Psychology, SASS,
City University, Whiskin Street,
London
EC1R 0JD

Dear Ms Brogan

Study title:	**How do people with Type 2 diabetes experience their relationship with food following a course in mindfulness?**
REC reference:	**16/SC/0648**
IRAS project ID:	**213120**

Thank you for your letter of 04 January 2017. I can confirm the REC has received the documents listed below and that these comply with the approval conditions detailed in our letter dated 21 December 2016

Documents received

The documents received were as follows:

Document	*Version*	*Date*
Copies of advertisement materials for research participants [recruitment advert]	2	04 January 2017
Covering letter on headed paper [cover letter]	1	04 January 2017

Appendix L: NHS Trust's letter of Capacity and Capability

[redacted]

06/03/2017

Ms Joelle Brogan
Dept of Psychology, SASS,
City University, Whiskin Street,
London
EC1R 0JD

Dear Ms Joelle Brogan,

[redacted] **NHS Trust**
Confirmation of Capacity and Capability

Project Title: How do people with Type 2 diabetes experience their relationship with food following a course in mindfulness?

IRAS Project ID: 213120
HRA approval date: 05/01/2017
[redacted] **BH REDA Reference:** 011807

All internal approvals and all regulatory approvals are now in place.

[redacted] NHS Trust can confirm that it has the capability and capacity to deliver the study.

Kind regards

[redacted]

Director of Research Services and Business Development

Appendix M: Certificate of Achievement in Good Clinical Practice

NHS
National Institute for Health Research
Clinical Research Network

CERTIFICATE of ACHIEVEMENT

This is to certify that

Joelle Brogan

has completed the course

Introduction to Good Clinical Practice eLearning (Secondary Care)

March 4, 2017

Modules completed:

Introduction to Research in the NHS
Good Clinical Practice and Standards in Research
Study Set Up and Responsibilities
The Process of Informed Consent
Data Collection and Documentation
Safety Reporting

This course is worth 4 CPD credits

CPD
The CPD Certification Service

National Institute for Health Research
Clinical Research Network

This content has been removed for data protection reasons

Section B: case study

Section C: Publishable Paper

Title: An IPA study on how participants with type 2 diabetes relate to food; a tentative role for loss and attachment

Short title: *Diabetes, food, and the role of loss and attachment*

Joelle Brogan, SASS, City University of London, London (email: [redacted])

Abstract:

Objectives: This study attempts to understand how people with type 2 diabetes experience their relationship with food in order to provide some insight that may inform the provision of psychological interventions.

Design: This is a qualitative study using Interpretative Phenomenological Analysis (IPA).

Methods: Semi-structured interviews were conducted with eight participants who were under the care of an NHS diabetes clinic. The interviews were transcribed verbatim and analysed according to IPA guidelines (Smith, Flowers & Larkin, 2009)

Results: A key theme was interpreted from this data to relate to the idea of a vulnerable and undisciplined child. This is discussed in relation to the literature based on this interpretation.

Conclusions: Although not generalisable to the population of people with type 2 diabetes, for these participants, loss was an issue that prompted a yearning for food as a security-enhancing figure in their lives. The clinical implications include developing an alternative sense of security other than food through learning to develop new relationships or through mentalising interventions are discussed. Ideas for future research and limitations of this current study are also discussed.

Keywords:

Diabetes; Type 2 diabetes; eating behaviours; loss; attachment; IPA.

Acknowledgements:

Written in accordance to the author guidelines of *British Journal of Health Psychology* which is included as an appendix.

Introduction

> "*The cost of treating diabetes will continue to spiral out of control and threaten to bankrupt the NHS. Now is the time for action" (Diabetes UK, August 2015).*

This dramatic quote highlights a number of issues. Firstly, diabetes is now one of the world's most common long-term health conditions with over four million people in the UK and 415 million people worldwide living with the condition (Diabetes UK, 2015). Type 2 diabetes makes up 90% of cases and the "main modifiable risk factors", according to Diabetes UK (2015), are being overweight and having an increased waist circumference. These risk factors alone have produced estimates of almost 12 million people in the UK as being currently at risk of developing type 2 diabetes. Secondly, diabetes is also a condition that has to be self-managed unlike many other conditions. This puts the weight of responsibility fully on the patients' shoulders and with it comes the stigma of being responsible for 'bankrupting the NHS' (Diabetes UK, 2015).

Overview

The prevalence of eating disorders especially Binge Eating Disorder (BED) and obesity-related eating behaviours amongst people with diabetes (PWD) has been reported to be in the region of 12% to 25% (Celik et al., 2015; Nicolau et al., 2015) and is related to increasing difficulties of losing weight and thus further complications (Ercan & Kiziltan, 2013; Gagnon, Aimé, Bélanger & Markowitz, 2012; García-Mayor & García-Soidán, 2017). However, it should be noted that there was an estimate of subclinical forms of BED being 20%. These identified non-pathological eating behaviours in PWD are restrained, external (in response to sights and smells of food) and emotional (Tak et al., 2015).

Food holds meaning in terms of self-identity, like sexuality, eating versus denial, guilty versus pleasure, and issues of self-control (Ogden, Liakopoulou, Antilliou & Gough, 2009). However, there is a paucity of qualitative literature on the specific lived experiences of food in PWD

despite the fact that nearly all studies on diabetes mention eating behaviour as being of the utmost importance in managing the condition. The available studies say that one of the main difficulties that PWD faced was in making adjustments to their eating behaviours. The difficulties that were experienced as they struggled to make these adjustments went through a number of stages. The first one was in adopting a diet that was in stark contrast to their previous diet and lifestyle (Castro-Sánchez & Ávila-Ortíz, 2013; Davis, Pope, Mason, Magwood & Jenkins, 2011; Lawton et al., 2008; Savoca & Miller, 2001). There were reported difficulties around social and cultural appropriateness of eating certain foods and PWD not wanting to offend people in their community or create alienation by not eating foods from their cultural heritage (Lawton et al., 2008). Although there was a tendency to start off by being strict with their new diets, not enjoying their food as much eventually led to non-compliance. Not being able to have the food they enjoyed and being unprepared for the changes in diet was a fundamental issue for some of these participants. This effect was heightened by the individual's personal history of eating patterns and social support issues along with repeated unsuccessful efforts to lose weight and emotional eating, which were all major themes. For example, Park, Quinn, Park and Martyn-Nemeth (2018) looked at the role of coping strategies as a mediator of particular types of eating behaviour in T2D when feelings of stress occur. When diabetes-related stress was experienced as measured by the Diabetes Distress Scale (DDS; Polonsky et al., 2005) the study found that emotion-oriented coping strategies (strategies aimed at regulating emotions) partially mediated the self-report of stress and external, emotional and restrained eating behaviours.

Living with diabetes is too broad a subject to study but one of the key relationships for people with type 2 diabetes is the relationship they have with food. This relationship is therefore of primary importance given that it has the most direct relationship to blood glucose levels. Food is also the main way by which type 2 diabetes develops, and the specificity of the relationship to it has not to date been the focus of any qualitative research with this group of people. It was decided that by focusing on this one aspect of living with diabetes, it might be possible to gain insight into a small part of the lived experience, and how they make sense of this experience.

By doing so, we could be in a better position to work with the barriers to improving people with diabetes' relationship with food.

Research methods

Design

There are a number of phenomenological methodologies, but because this research is focused on the centrality and meaning of the participants' subjective experiences (idiography) and hermeneutics, interpretative phenomenological analysis (IPA) was chosen as the methodology to capture how participants made sense of their experiences. Phenomenology philosophy has provided qualitative research methods, and in particular IPA, with an understanding of how to examine the 'lived experience', which is the key aspect of this research. IPA seeks to describe and interpret the experiences that a 'particular person in a particular context' has. IPA describes and interprets what the participants bring to mind about their 'relatedness to the phenomena at hand' (Giorgi, 1985). This is the relationship they have with food and the sense they made of it at the time of the interview. IPA does not seek to explain this experience. IPA is aligned to the concept of 'embodied cognitions' that refers to how the mind should be understood in relation to the physical body and its interactions with the world (Wilson, 2002). This assumes that it is the body that "is a significant factor in how humans perceive, comprehend and act in the world" (Spackman & Yanchar, 2014, p. 47). In relation to the research question, this approach allows for the lived experience to take the foreground prior to any intellectual analysis (Smith, Flowers & Larkin, 2009). It was therefore concluded that this was an appropriate methodology for research, seeking to understand the lived experience of having a body that potentially shapes the relationship the participants have with food.

Setting and sampling strategy

Participants were sought from a diabetes clinic in a London hospital as a purposive sample. The patients were sent an advert and recruitment letter by the administrators in the clinic via

email or post if necessary. In total, eight participants were recruited. Table 1 gives a brief outline of the demographics of the participants interviewed.

The exclusion of patients with type 1 diabetes may have resulted in fewer young adults being able to participate, but as the nature of the disease for type 1 is different, to avoid the risk of the research producing a comparative study of results with type 2, it felt necessary to exclude them. It was also felt that although food was an issue for both type 1 and type 2 patients once diagnosed, it was with patients with type 2 diabetes that food would have played a more major role in its development unlike with type 1.

Data collection technique

The mainstay of data collection for an IPA study is via semi-structured interviews. This allows for a flexible data collection as the initial questions can be modified depending on the responses given by the participant. The researcher can also probe any interesting areas that arise that may not have been considered initially. These questions were a reflection of the topic of interest, that is, the experience of their relationship with food following a course in mindfulness rather than being informed from existing literature. This allowed for a broader and exploratory interview by remaining open to what is not known rather than what is known. Interviews took place in a room at the diabetes clinic with which they were familiar and were audio-recorded.

Analysis

The first stage of the analysis process involved the transcription of the interview verbatim. The central tenet in the analysis of the transcripts is 'meaning'. This requires an engagement with the transcripts and to enter a process of interpretation. Smith, Flowers & Larkin's (2009) step-by-step guide on the analysis process was utilised and the aims are twofold. Firstly, it is an attempt to describe the experiences of a specific relationship but keeping in mind that this is a co-constructed process between participant and researcher. Therefore, the initial stage is to

produce “a coherent, third-person, and psychologically informed description which tried to get as ‘close’ to the participant’s view as is possible” (Larkin, Watts & Clifton, 2006, p. 104). Secondly, the guide was to position this description in the wider literature and in doing so provide a commentary on how the participants are making sense by using critical and conceptual interpretations (Smith & Osborn, 2003).

Results

Certain themes and patterns were created for the purpose of analysing the data. The particular theme of interest for the purposes of this article is *Vulnerable and Undisciplined Child.* One of the most striking aspects of how the participants described their experiences of their relationships with food was how it was linked to their childhood and the losses experienced at a young age. The ‘childlike’ aspect was heightened for a number of participants who described craving certain foods and that they needed others to prepare the food because they could not be trusted with food. These tensions are held across the two superordinate themes of *Craving the taste of childhood* followed by *Not to be trusted with food.* Pseudonyms are used throughout this article to protect the identity of the participants.

Craving the taste of childhood

The craving of the taste of childhood was described by most of the participants as a conscious experience of taste, such as sweets or particular meals. Vea was able to articulate very clearly what her experience was like when it came to maintaining a relationship with her mother who died when she was 13 years old:

> *“…so to me, giving her back something in life, I was eating for two. Instead of having one glass of wine I’d have two glasses of wine, so I was eating for comfort, comfort, comfort eating.” (Vea)*

This voice of the 'vulnerable child' was apparent in other people's accounts too, and often in the context of loss of a parent or carer through death. Kevin had been cared for by his grandmother and he was able to link the associations he has of food to the comfort this gave him:

> *"I think there is a comfort thing with food. I think, you know, that is the sort of, you know, that's the sort of, er, relationship with my grandmother and food and stuff like that when she was…that there, you know, is the care and love associations with food and therefore by feeding myself, I am loving and caring for myself…" (Kevin)*

The lack of stimulation and affection from the parents was also noticeable in the responses. Barbara expressed a relationship with food that was a chore, a thing to get done, and this was reflected in how she experienced meal times with her parents (the 'couple') when she was a child:

> *"…you sat down at meals together, but there would often be tension. The tension of perhaps lack of communication or non-speaking between the couple, um, also I think some tensions inasmuch as it was a very enclosed, um family unit, which didn't have too much outside social contact." (Barbara)*

Perhaps the rather distant sounding relationship Barbara had with her parents influenced her relationship with food. She talked about the needs she had which were not met by 'the couple' and how she had looked to food to give her all the things she did not have as a child:

> *"Filling up a gap. An emotional gap and a mental gap (…) and of course it didn't work but even so, the, the, the habit of using it as a substitute was well engrained in me by then." (Barbara)*

Again, the idea of food as a habit and something to be 'used' permeates descriptions by Barbara and others. Barbara expanded on this in more detail as she reflected further on this subject and described food as a way of loving herself and being loved:

> *"There's something in my mind from my childhood, food equals love. Food, plenty of it. Food, lifestyle equals a way of expressing love (…) if there is no, what shall I say, um, physical demonstration, verbal demonstration that you're valued and loved, it, it becomes a way of saying that you are and I'd buy sweets every week, you know, I'd go and buy a box of chocolates when I'm out (…) because there was that lack of it, which I've had to work really hard to recover for myself." (Barbara)*

The sadness that permeated the experiences that the participants had in their relationship with food and the continued efforts to rekindle something or even to start a relationship that never had existed as with Barbara, is part of what most of the participants described as experiencing and they are heart-felt and have a desperation about them. Jacinta lost her mother just as she was becoming an adult.

> *"Just before I was twenty one, um, she died (…) it was like, I didn't realise it was a coping mechanism (…) I just kept eating (…) and I find it, you know, I don't know if that is what's happening and now I can't really get out of this depressive moods, you that, that's haunt me so much." (Jacinta)*

The use of the word 'haunt' captures a sense of being enveloped by these inescapable moods that she experienced and continues to experience.

Vea described how her experiences had made her realise just how much her relationship with food had potentially been about replicating her relationship with her mother.

"I used to turn to food for comfort because my mother was never with me." (Vea)

"I was living my life in my mother." (Vea)

She also described how that 'internal mother' which she carried in her stomach was causing her pain:

"*Because I had pain, I missed my mum so to me your mum was there." (Vea)*

"…by having filling my stomach was oooh that's where all my pain was and why I'm saying that to you, on reflection now the night my mother died, I was by her bed and (…) as she's dying, I just held on to my stomach." (Vea)

Vea spoke as if someone else was speaking for her at times which was noticeable when she said '*your mum'* rather than 'my mum'.

Whether food was conceptualised as a coping mechanism borne out of some sort of grief or loss, it did seem to stem from their much earlier lives but kept alive in the present with the food. Like others, Sandeep spoke about the type of foods he would crave in a way which implies that he has not moved on from being a child:

"…even now I, I , I go to the shop and buy Wagon Wheels, which is sort of a reminder of my childhood. The flavours haven't changed (…) it's a craving for a particular taste…" (Sandeep)

"*I'm still a child, I still go down to the sweet shop and buy…a savoury pie and a, a Lion Bar for lunch and eat that…" (Sandeep)*

Not to be trusted with food

This theme of not being trusted with food begins with Cheryl, as she described her way to deal with food was to not keep it indoors:

> *"I go into Waitrose…I don't keep food in the house. I use it as my larder. I call it the larder." (Cheryl)*

Cheryl came over as very matter-of-fact about this idea of treating a nearby supermarket as her larder. The supermarket became an extension to her and of her house as if it was a possession to perhaps compensate for the lost one. The idea of not being trusted with food was continued as she often referred to her eating as 'naughty' which was reminiscent of quite a childlike way of talking about oneself and one that conjures up the perception of an undisciplined child.

> *"I usually eat in front of the television, which is very naughty…" (Cheryl)*
> *"…sometimes in the week if I'm feeling naughty er bacon and tomatoes…" (Cheryl)*
> *"I was naughty this morning, I had another piece of toast…" (Cheryl)*
> *"I was very naughty the day I came back, this is a very naughty week (…) very naughty when I came back..." (Cheryl)*

This childlike way of talking to herself through the repetition of the word 'naughty' was also extended to a dietician who had recommended that she cut back on certain foods:

> *"…stopped me from eating taramasalata. She said very, very naughty, so that's a treat as well sometimes" (Cheryl)*

But in this instance she converted it from being naughty to being a treat, which may be her attempt to be loving toward herself.

Sandeep's way of relating to food would often result in what can be interpreted as an undisciplined childlike way of eating:

> *"…so grabbing whatever's available to me in the kitchen and, and stuffing it in my mouth and then going back to sleep." (Sandeep)*

This conjures up the image of a baby being fed and then going back to sleep as if it has a soporific effect on him. This way of eating to calm oneself, similar to that of a child or even a baby, is something that Aja seemed very prone to as she talked about 'wanting the taste' or feeling the need to 'just chew'. It's that visceral sense of oral satisfaction that comes through an almost complete disregard of the consequence – an almost primal need.

> *"I keep wanting to, to have those taste, you know, that taste that what I had in my childhood, er, now I just crave for that taste." (Aja)*
> *"Even if I'm not hungry I'll go and have it because…I just want to taste that." (Aja)*

The taste for Aja is more important than the hunger or anything else. This entering into a childlike or primal state had the effect of a relinquishment of taking responsibility of the consequences. Maybe what they are describing is the sense that they just gave up trying and failing.

> *"I do sometimes feel I can't be bothered to (…) eat certain foods and not eat certain foods. Eat the certain set amount (…) because I am enjoying it so much, I want more of it and then I get full." (Aja)*

Aja did wish it was different and that she could help herself but to do that was not about the lack of knowledge, as mentioned above, but the will to make the changes necessary. To do that seems to require an attitude change which she just did not feel able to affect:

> *"…having sugar will affect my liver or my body or because I'm aware of all those things, I am, it's just, I don't know how to get myself round to taking it seriously (…) I don't think I'm taking it seriously because I can't…. I don't know what to…how to…I don't know how to take it seriously…" (Aja)*

It is as though 'taste' is the opposite of 'taking it seriously' which would make taste the same as play. This childlike vulnerability reverberates throughout the accounts. Kevin was fully aware of how his relationship with food was a re-enactment of his childhood. He started by recounting how his relationship with food changed after his main carer (his grandmother) died:

> *"My grandmother did die when I was reasonably young, about 12, which you know, was quite devastating for me. Um, my mother was still working and I started looking after myself (…) I often cooked something for myself (…) pretty awful stuff (…) it was just sort of you know, whatever it was, cheese on toast or (…) I had a fondness for curries which of course meant the house stank of curry the whole time, although I never noticed, you know, just frying onions and putting curry powder in and bits and pieces." (Kevin)*

Kevin's childlike way of looking after himself has reversed in adulthood as the thing that could potential harm him. There was a sense of being oblivious to his surroundings ("I never noticed") and a slightly chaotic-sounding way of feeding himself almost like he himself was in 'bits and pieces' and this is how he held himself together. This way of eating continued into adulthood.

"Because, you know, the mindset, you know, it's like 'Well it's better not to eat' you know and then when you do eat, 'Oh fuck it's all gone wrong, so I'll just eat'. You know what I mean? So it was like 'Oh I've broken it' so I'll press the 'Fuck it' button now and just go for it." (Kevin)

Vea seemed uncertain in her constant questioning style as she considered her relationship with food and wondered, for example, if it was also a way of keeping herself safe.

"I said to myself, did I kept her in me so that I do nothing bad in my life?" (Vea).

This interview was a very reflective experience for Vea as possibly indicated by the use of questions which were to herself rather than to me. The idea of keeping her mother in her could also be understood by Vea as a way of keeping herself disciplined and therefore safe. Barbara, however, described how she does not find food satisfying and part of the reason for that is down to her experience of feeling a lack of confidence with food and a sense of therefore not to be trusted with food.

"I've not fully claimed and stand on my own ground as an individual (…) in terms of food, I'm not safe on my own ground." (Barbara)

The only way Barbara felt she could have a relationship with food was to engage the care of someone else:

"have someone lay the nice plate of acceptable, well-balanced food in front of me and I'd happily eat it, not too much, not overdo it, thank you." (Barbara)

This theme of child-like rebellion is probably best summed up by Kevin when he described what happens to him when he lets go of trying to be careful with food.

"…when I'm in low moods, I tend to go, you know, I feel like a kid wandering around giving everything the V signals, you know, you know, you know, just 'fuck off, fuck off, fuck off'…." (Kevin)

Discussion

Evidence shows that high-calorie foods can have a calming effect on the areas of the brain involved in the response to stress (Peters, Pellerin & Dallman, 2007). Amongst the participants, this seemed evident as Kevin spoke of food having a narcotic effect and Sandeep reported that he would go to sleep immediately following a binge. There is also evidence that stress and loss can activate particular patterns or cognitive schemas known as attachment styles, and a growing body of literature on the utility of using attachment theory provides us with another lens with which to view the participants' experiences (Bowlby, 1980; Slade, 1999). In relation to the experiences of the participants in this study, attachment theory offers a compelling interpretation on the way food may be being used as an external source of emotional regulation (Armstrong & Roth, 1989; Mikulincer & Florian 1998; Tasca & Balfour, 2014; Taube-Schiff, Van Exan, Tanaka, Wnuk, Hawa & Sockalingam, 2015).

Attachment refers to the biologically-evolved behavioural system that starts from birth and is activated in anxiety-provoking situations which motivates the infant to seek proximity to a caregiver, or attachment figure to give them a sense of safety and security (Bowlby, 1969). If the attachment figure is sensitive and responsive to the child's needs, a stable sense of attachment security is established and helps the child to develop a positive mental representation of self and others. However, if the attachment figure is unreliable in their availability and support and unlikely to relieve their distress, then negative models of self and others are formed. This is likely to increase maladjustment behaviours and later emotional problems. For a child who has lost their attachment figure the stages of mourning are described as numbness, yearning and searching, disorganisation and despair, and finally,

reorganisation (Bowlby, 1980). The yearning and searching is understood in attachment theory as behaviour based in the hope of restoring the lost person although the resumption of personal relationships may never be fully attained (Bowlby 1980). This is particularly pertinent to the participants, due to the loss and unavailability of their primary attachment figures, namely for Vea, Barbara, Kevin and Jacinta.

Securely attached individuals tend to be able to reflect on their relationships and therefore engage in meta-cognitions. They are also able to communicate and ask for support when needed, and disclose information about themselves appropriately (Johnson, 2003). Insecurely attached individuals are more likely to demonstrate emotional neediness due to a sensitivity to loss or potential abandonment and this leads to a tendency to not trust others easily. These have particular importance to how people manage their diabetes as bodily illnesses are regarded as threats and thus trigger attachment patterns (Hunter & Maunder, 2001).

Hunter and Maunder (2001) utilise Bowlby's (1980) concept of the internal working model (IWM) which is a cognitive schema that maintains attachment patterns over a lifetime. The IWM of the insecure-anxious attachment style predicts an almost constant distress signal as a means of maintaining proximity to the attachment figure which could translate, in the case of the participants from this study, to food becoming an external source of comfort in the absence of an IWM of a secure attachment figure. Those who are anxiously attached may relate to food that follows a typical anxious-attachment style, which is to seek a relationship, in this case with food, in times of distress in order to obtain some relief but never quite feel satisfied (Mantilla, Clinton & Birgegard, 2018). This sentiment is repeated by the participants Aja and Jacinta who described themselves as searching and yearning but never quite being satisfied. There is an insatiable need for being soothed thus making emotional regulation a key deficit. Aja found it particularly difficult to stop eating and observed that she was not taking diabetes seriously "because I can't".

Insecure-avoidant IWMs predicts that others will be unreliable and so there is a tendency to be self-reliant. Illness disrupts this preference for self-reliance so there is sometimes a denial of needing anything and a rejection of medical advice and non-compliance (Hunter & Maunder, 2001). Barbara had experienced the unreliability of her parents who she referred to in an unaffectionate way as "the couple". Diabetes had the effect of knocking her off-balance, or as she put it, "I've not fully claimed and stand on my own ground as an individual… in terms of food". The preference for self-reliance was evident when she referred to "old habits die hard" and how since receiving a diagnosis of diabetes, she found eating a chore and did not "regard it as an essential resource of my life". It was seen as "an interruption" and she resented the time she had to spend with engaging with it. Food became a relationship with which she was now reliant and diabetes made this a potential ongoing problem. This would also be consistent with an avoidant attachment style being associated with an increase in HbA1c levels and difficulties in adjusting to a diabetes diagnosis (Bazzazia & Besharat, 2012; Ciechanowski, Kirsch & Katon, 2002; Cohen Birnbaum, Meyuchas, Levinger, Florian & Mikulincer, 2005) and not allowing for the development of a sense of mastery and sensitivity to bodily needs as well as self-control at times of health crises (Maunder & Hunter, 2001).

Although none of the participants were diagnosed with an eating disorder, there was evidence of disordered eating patterns. Aja referred to herself as engaging in binge eating and Kevin referred to himself as an "unsuccessful anorexic", a "compulsive obsessive" eater and overeater. Sandeep also suggested that he could understand his relationship with food as being akin to how people with bulimia and anorexia experience food. The relevance of attachment theory to disordered eating patterns was reviewed in a meta-analysis by Faber, Dubé and Knauper (2017). They looked at data from 70 studies and over 19,000 participants from the general population and found that higher attachment insecurity (anxiety, avoidance and fearfulness) was significantly associated with more unhealthy eating behaviours. The link between attachment and eating behaviours are suggested to be due to four interrelated mechanisms, namely: general vulnerability view; inability to regulate emotions; poor self-

representation; and interpersonal difficulties (Faber, Dubé & Knauper, 2017). Therefore, unhealthy eating behaviours are seen as a maladaptive coping strategy due to an inability to cope, regulate or disengage from negative emotions and stress, in the face of poor self-representations and difficulties in relating to others (Bélanger Di Schiavi, Sabourin, Dugal, El Baalbaki & Lussier, 2014; Wilkinson, Rowe, Robinson & Hardman, 2018). For many of the participants in this study, distress featured highly in relation to food, and there was a tendency to use food to reduce this distress and therefore could represent a maladaptive coping strategy to regulate their emotions. Some reported that eating was a way to get comfort and sometimes to stop themselves from "screaming", literally stuffing their emotions, or to "get rid of annoying thoughts". This finding is reflected in studies such as O'Kearney's (1996) who noted that anorexic patients appeared more avoidant of involvement in general as well as with food whereas the bulimic population seemed angrier and more chaotic.

There is also some evidence that those with binge eating disorders had a higher incidence of loss and a pattern of attachment disorganisation (Barone & Guiducci, 2008). This resonated with the experiences that many of the participants tried to make sense of. The undisciplined and chaotic nature of Kevin, Aja and Sandeep's eating comes to mind as possible examples of disorganisation where they reported giving up on controlling what they ate and eating whatever and whenever they liked. The experience of loss is echoed by the reported experiences of the current participants and is an experience reflected in much of the research in the last decade (O'Shaughnessy & Dallos, 2009; D'Argenio, Mazzi, Pecchioli, Di Lorenzo, Siracusano & Troisi, 2009). These findings also correspond with studies suggesting that the reason why those with insecure attachment styles have problems around eating is due to misinterpreting their attachment anxiety signals and fears of abandonment as hunger (Alexander & Siegel, 2013). A striking example of this is when Vea reflected that she had turned to food "because my mother was never with me" and she thought it was a way of "keeping her alive inside" her, like an internal version. that by feeding himself, he was "loving and caring for myself". It has been suggested that those with insecure attachment styles, i.e.

anxious or avoidant styles, are less able to self-soothe (Gilbert & Proctor, 2006). These cases may imply that patients with diabetes who overeat may benefit from being taught to increase their awareness of physical and emotional internal cues (Warren, Smith & Ashwell, 2017) and how to self-soothe. Gilbert suggests this needs to be done in a way that is self-compassionate rather than relying on external sources like food (Gilbert, 2010).

Bowlby (1977) said: "Whilst especially evident during early childhood, attachment behaviour is held to characterise human beings from the cradle to the grave" (p. 129). Attachment patterns in adulthood are subject to changes due to experiences throughout one's life. For those who went on to experience nurturing and supportive relationships, in the case of Vea and Barbara with God, then it becomes possible that "old routines rendered meaningless give way to new habits" (Gomez, 1997, p. 165). This is when new relationships with food become possible and Vea would "just open the Bible" instead of "grabbing the biscuit tin" and Barbara spoke of her reengagement with "contemplative prayer". There is some evidence that an attachment to God can protect an individual from eating disorders (Homan & Boyatzis (2010). This seems to suggest that patients with diabetes who have unhealthy eating behaviours may benefit from help with establishing new relationships to enable the formation of new habits (Gomez, 1997).

Conclusions

The reported experiences seem to indicate that the participants' relationships to food was the same even prior to a diagnosis of diabetes. Attachment theory has been applied to these experiences as a way of illuminating the possible underlying mechanisms for these difficult relationships and the findings here add to the body of evidence in the literature. The distress of a chronic condition, like diabetes, is regarded as a threat which sets off in motion particular attachment styles in an effort to reduce the distress. Some of these styles such as insecure-avoidant and insecure-anxious may lead to the particular patterns of using food to regulate emotions as evidenced by the participants.

The clinical implications of these findings suggest that if insecure attachment styles lead to a tendency to respond to stress using food then learning new ways to regulate emotions would be potentially beneficial. This requires a shift in awareness and attention to experiences that trigger an automatic turning-to-food response. Mindfulness-based interventions offer compelling evidence in its ability to effect change in awareness and attention thus leading to the opportunity to have an alternative response. In the diabetes population this study indicates that the nature of the experiences, such as insecure attachment styles, may also require additional training in body awareness, and mentalisation in order to make the most of mindfulness training.

Limitations

In considering the role of attachment it must be kept in mind that most of these studies are correlational designs so do not represent proof. The studies also use different measures of attachment style for example using the Adult Attachment Interview (AAI; George, Kaplan & Main, 1996) or a self-report relationship questionnaire (RQ: Bartholomew & Horowitz, 1991). This makes it difficult to compare across studies and there is also a paucity of studies looking at the difference between men and women in attachment styles in relation to eating behaviours. One study showed that when this was investigated the insecure attachment style in men did not predict eating disorders which raises the issue of why this may be the case (Elgin & Pritchard, 2006). The differences between men and women were not highlighted in a review of current research (Tasca & Balfour, 2014). This may reflect the tendency to focus on clinically diagnosed eating disorders which is more common in women than men but there is evidence that men are more likely than women to report overeating rather than disordered eating styles (Striegel-Moore, Rosselli, Perrin et al, 2009).

Another limitation is in the methodology chosen. Using IPA methodology means the findings are not generalisable to the whole diabetes population. Therefore these findings reflect the experiences of those who participated and IPA describes and interprets what the participants bring to mind about their relatedness to the phenomena at hand, that is the relationship they

have with food and the sense they made of it at the time of the interview (Giorgi, 1995). What the findings suggest however is that where there is evidence of disordered or overeating behaviours, attachment theory may be able to offer insight into the behaviours that is plausible.

Further research

It is hoped that this study can stimulate further research into the everyday lives of the millions of people trying to manage their diabetes. A potential area of research therefore is in the development of interventions such as mindfulness specifically for people with diabetes. A number of studies have begun to isolate the facets of mindfulness that have an effect on behaviours and attitudes. Future research within the field of diabetes could investigate the effects of these facets of mindfulness on developing the ability to understand the mental, emotional and physical state of self and how this impacts on their attachment style.

Demographics	Reported
Age	Range: 46-73 (Mean: 63.6)
Ethnicity	37.5% White British, 37.5% Caribbean, 25% British Asian
Years since diabetes diagnosis	Range: 5-23 years (Mean: 14 years)
Employment status	75% retired
Household	87.5% lived alone
Relatives with diabetes	100%
Management of diabetes	100% medication/50% diet

Table 1. Brief overview of basic demographics of participants

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Appendix: Author Guidelines of *British Journal of Health Psychology*

The aim of the British Journal of Health Psychology is to provide a forum for high quality research relating to health and illness. The scope of the journal includes all areas of health psychology as outlined in the Journal Overview.
The types of paper invited are:

• papers reporting original empirical investigations, using either quantitative or qualitative methods, including reports of interventions in clinical and non-clinical populations;
• theoretical papers which report analyses on established theories in health psychology;

• we particularly welcome review papers, which should aim to provide systematic overviews, evaluations and interpretations of research in a given field of health psychology; and

• methodological papers dealing with methodological issues of particular relevance to health psychology.

Authors who are interested in submitting papers that do not fit into these categories are advised to contact the editors who would be very happy to discuss the potential submission.

All papers published in The British Journal of Health Psychology are eligible for Panel A: Psychology, Psychiatry and Neuroscience in the Research Excellence Framework (REF).

1. Circulation
The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length
Papers describing quantitative research (including reviews with quantitative analyses) should be no more than 5000 words (excluding the abstract, reference list, tables and figures). Papers describing qualitative research (including reviews with qualitative analyses) should be no more than 6000 words (including quotes, whether in the text or in tables, but excluding the abstract, tables, figures and references). The Editors retain discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

3. Editorial policy
The Journal receives a large volume of papers to review each year, and in order to make the process as efficient as possible for authors and editors alike, all papers are initially examined by the Editors to

ascertain whether the article is suitable for full peer review. In order to qualify for full review, papers must meet the following criteria:

• the content of the paper falls within the scope of the Journal

• the methods and/or sample size are appropriate for the questions being addressed

• research with student populations is appropriately justified

• the word count is within the stated limit for the Journal (i.e. 5000 words, or 6,000 words for qualitative papers)

4. Submission and reviewing

All manuscripts must be submitted via Editorial Manager. The Journal operates a policy of anonymous (double blind) peer review. We also operate a triage process in which submissions that are out of scope or otherwise inappropriate will be rejected by the editors without external peer review to avoid unnecessary delays. Before submitting, please read the terms and conditions of submission and the declaration of competing interests. You may also like to use the Submission Checklist to help your prepare your paper.

5. Manuscript requirements

• Contributions must be typed in double spacing with wide margins. All sheets must be numbered.

• Manuscripts should be preceded by a title page which includes a full list of authors and their affiliations, as well as the corresponding author's contact details. You may like to use this template. When entering the author names into Editorial Manager, the corresponding author will be asked to provide a CRediT contributor role to classify the role that each author played in creating the manuscript. Please see the Project CRediTwebsite for a list of roles.

• For articles containing original scientific research, a structured abstract of up to 250 words should be included with the headings: Objectives, Design, Methods, Results, Conclusions. Review articles should use these headings: Purpose, Methods, Results, Conclusions. As the abstract is often the most widely visible part of your paper, it is important that it conveys succinctly all the most important features of your study. You can save words by writing short, direct sentences. Helpful hints about writing the conclusions to abstracts can be found here.