A qualitative study of overweight and obese Australians' views of food addiction


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Title: A Qualitative Study of Overweight and Obese Australians’ views of Food Addiction

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Abstract

The concept of food addiction is increasingly used in the academic literature and popular media to explain some forms of overweight and obesity. However, there is limited evidence on how this term is understood by and impacts overweight and obese individuals. This qualitative study investigated the views of overweight and obese individuals on food addiction, and its likely impact upon stigma, treatment-seeking, and support for public policies to reduce overeating. Semi-structured interviews were conducted with 23 overweight and obese individuals (\( M_{age} = 38, M_{BMI} = 33, 74\% \text{ female} \)) and analysed thematically. The concept of food addiction was consistent with many participants’ personal experiences, and was accompanied by high perceptions of control and personal responsibility. Some participants believed “sugar” or “fat” addiction to be more accurate. Others were reluctant to be described as an “addict” owing to perceived negative connotations and the belief that it would increase self-stigma. Food addiction was seen as a motivator for seeking psychological services, but not pharmaceutical or surgical treatments. In light of food addiction being perceived as plausible and relevant, participants supported targeted public health policies (e.g., taxes, regulations for junk food container sizes) but did not believe these would affect their own purchasing or consumption behaviours. Education for interpreting food labels and reducing the costs of healthy foods were endorsed, leading to positive changes in food-related behaviours. This research suggests discretionary use of the food addiction label in a supportive and educational manner to minimise stigma while encouraging treatment-seeking.

Keywords: Food addiction, Obesity, Overeating, Stigma, Treatment, Policy

Abbreviations: Body Mass Index kg/m\(^2\) (BMI), General Practitioners (GPs), Yale Food Addiction Scale (YFAS), Years old (yo)
Introduction

The prevalence of overweight and obesity is increasing globally and is expected to affect 2.16 billion people by 2030 (Kelly, Yang, Chen, Reynolds, & He, 2008). Associated health costs have reached AU$21 billion per year in Australia (Colagiuri et al., 2010). In the United States of America (USA), annual costs are expected to increase by up to USA$66 billion/year by 2030 (Wang, McPherson, Marsh, Gortmaker, & Brown, 2011). Despite the growing prevalence of excess weight, there are currently insufficient effective long term treatments for obesity (Dixon, Logue, & Komesaroff, 2013; Fisher & Schauer, 2002; Whiting et al., 2013). Weight loss interventions, such as lifestyle (e.g. diet and exercise) and pharmacological treatments, are only modestly effective (Manning, Pucci & Finer, 2014), while bariatric surgery is only suitable for a small percentage of individuals with severe or complex obesity (Dixon, Logue, & Komesaroff, 2013). Unfortunately, for most obese and overweight individuals, the initial weight loss from these treatments is often followed by weight regain (Anderson et al., 2001). A number of leading obesity and addiction researchers have argued that some forms of obesity may be best understood as a consequence of, and treated as, an addiction to food (Avena, 2010; Gearhardt, Grilo, Dileone, Brownell, & Potenza, 2011; Volkow, Wang, Tomasi, & Baler, 2013). They argue that food addiction may explain the poor effectiveness of weight loss interventions and subsequent weight gain. The concept of food addiction (hereafter ‘food addiction’) has generated significant research and media interest (Gameau, 2015; Garth, 2014; Kontominas, 2015; Medaris Miller, 2015), but little is known about the impact that describing obesity as a food addiction would have on overweight or obese individuals.
The self-reported consumption of certain refined foods, such as those high in sugars and fats, by some obese individuals resembles the diagnostic criteria for drug addiction, including impaired control over consumption, greater than intended use, tolerance, and the development of a withdrawal-like syndrome following attempts to cut down (Avena, Bocarsly, Hoebel, & Gold, 2011; Davis et al., 2011; Ifland et al., 2009; Meule & Gearhardt, 2014b). There are also neurobiological similarities between drug addiction and models of obesity. The chronic consumption of refined foods produces changes in the reward pathway of the brain that are also observed in animal models of drug addiction (Avena, 2010; Epstein & Shaham, 2010; Ziauddeen & Fletcher, 2013). Laboratory studies have also shown that when given the choice, rodents will preferentially consume high calorie foods that lead to weight gain (Epstein & Shaham, 2010; Ziauddeen & Fletcher, 2013), a pattern of eating that continues even in the face of aversive stimuli (Epstein & Shaham, 2010), similar to behaviours seen in drug addiction.

These animal studies are consistent with neuroscience research in overweight or obese humans (Smith & Robbins, 2013; Ziauddeen & Fletcher, 2013). Brain studies in obese humans reveal structural and functional changes in executive functioning and decision-making similar to those seen in addicted individuals (Frascella, Potenza, Brown, & Childress, 2010). There are also comparable cognitive impairments in these two populations, such as impaired executive functioning, attention (Bechara, 2005; Fitzpatrick, Gilbert, & Serpell, 2013; Frascella et al., 2010), impaired inhibitory control (Barry, Clarke, & Petry, 2009; Gearhardt et al., 2011), and impaired reward processing, that likely contributes to chronic overeating (Smith & Robbins, 2013).
The validity and utility of the concept of food addiction, however, remains controversial (Carter et al., 2016; Davis et al., 2011; Gearhardt et al., 2011; Ziauddeen, Farooqi, & Fletcher, 2012; Ziauddeen & Fletcher, 2013). Supporters of the concept of food addiction claim that its adoption by clinicians and policy makers will result in better treatments and improved policy outcomes (Gearhardt et al., 2011; Volkow & O’Brien, 2007; Volkow, Wang, & Baler, 2011). They argue that a food addiction explanation may reduce the significant self-blame associated with being overweight by providing biological accounts that view the disorder as intrinsic rather than simply a poor choice (Pearl & Lebowitz, 2014). Proponents hope that the food addiction model of overweight and obesity will also reduce societal stigma (Latner, Puhl, Murakami, & O’Brien, 2014) and the discrimination experienced by overweight people (Gearhardt, Bragg, et al., 2012; Puhl & Heuer, 2009), both of which are significant barriers to treatment-seeking (McFarling, D’Angelo, Drain, Gibbs, & Rae Olmsted, 2011; Pescosolido et al., 2010). Some advocates argue that these changes will increase public support for population-level policies directed at reducing overeating, such as taxing and regulating the sale of energy dense foods (Gearhardt et al., 2011; Pearl & Lebowitz, 2014). At present there is little public support for these measures (Lee et al., 2013), despite significant evidence of their effectiveness in reducing the use of other addictive commodities, most notably tobacco (Hall & Carter, 2013; Oliver & Lee, 2005).

Critics argue that treating obesity as a food addiction may have a number of potential negative consequences. Rather than reducing stigma, food addiction may in fact increase stigmatisation, as has occurred following neurobiological explanations of drug addiction (Pescosolido et al., 2010; Stice, Figlewicz, Gosnell, Levine, & Pratt, 2013). Increased stigmatisation may subsequently encourage emotionally-driven, maladaptive overeating (Gianini, White, & Masheb, 2013). Such “fixed” biological
attributions may also erode individuals’ self-confidence and belief in their ability to lose weight (Burnette, 2010; Pearl & Lebowitz, 2014), reducing the perceived importance of healthy eating (Hoyt, Burnette, & Auster-Gussman, 2014). By framing obesity as a “brain disorder” the food addiction hypothesis may foster overreliance upon individual medical interventions (Hardman et al., 2015). Similar medical explanations of obesity in the 1950s inadvertently increased stigma and undermined population-wide policies (Rasmussen, 2012, 2015) and created a surge in membership of weight-loss groups that failed to have a significant impact on obesity (Parr, 2014). The suggestion that food addiction is an individual flaw may further undermine support for population wide policies such as those that change the food environment by regulating portion sizes and the cost or availability of energy dense foods (Pearl & Lebowitz, 2014). The public may view these as ineffective if they are not seen to address what is understood to be a neurobiological addiction (Iselin & Addis, 2003).

Despite the competing predictions about the likely clinical and social consequences of the use of food addiction as a diagnostic category, there has been very little research on the views of those most directly affected by the concept, namely overweight and obese individuals. The present study employed a qualitative research methodology to examine the perspectives and attitudes of overweight and obese individuals. Specifically, it aimed to examine: (a) attitudes towards the concept of food addiction; (b) whether food addiction explanations of obesity affect discrimination, control, and responsibility; (c) how the use of the concept of food addiction influences treatment-seeking behaviour, particularly medical interventions; and (d) possible uses for the food addiction concept in improving public health and addressing overeating.
Method

One-on-one semi-structured interviews were conducted with 23 individuals over 18 years of age with self-reported Body Mass Index (BMI) > 25. Participants were recruited to explore differences in the way that individuals view the concept of food addiction across a range of weight ranges. The participants were recruited from: (a) an obesity clinic that specialised in surgical treatments (among other treatments), and (b) an online advertisement through Monash University accessible to the public. We employed a purposive sampling approach to recruitment (Sarantakos, 2005) to ensure that the sample included individuals of both sexes and various ages, with a broad range of weight-loss experiences, including self-managed or no assisted weight-loss attempts, as well as those in clinical treatment (including for bariatric surgery). It became apparent during the piloting of the interview that people with different weight-loss experiences viewed their weight differently and held different attitudes towards treatment. Participants were provided with a gift card in recognition of their travel and time. Ethics approval was obtained from the Monash University Human Research Ethics Committee.

All participants completed the Yale Food Addiction Scale (YFAS) a validated and the most commonly used measure of food addiction (Eichen, Lent, Goldbacher, & Foster, 2013; Gearhardt, Corbin, & Brownell, 2009) in order to enrich our characterisation of participants in the study and to ensure data saturation. Questions are scored within categories derived from diagnostic criteria for other addictions. Responses were recoded to be dichotomous (i.e. Question 1 responses of ‘4 or more times or daily’ were recoded to ‘Yes’ and scored one point). Any criterion which is recoded to a score of one is considered ‘met’. All met criteria were summed, and participants with a score
of 3 or more of these symptom criteria were considered to meet a food addiction ‘diagnosis’ (Clark & Saules, 2013; Meule & Gearhardt, 2014a). YFAS has been found to display good convergent validity with established measures of similar constructs (range of $r = .46$ to $.61$), good internal reliability (Kuder-Richardson $\alpha = .86$), and discriminant validity (range of $r = .01$ to $.47$) (Davis et al., 2011; Gearhardt, White, et al., 2012; Gearhardt et al., 2009; Gearhardt, Roberto, Seamans, Corbin, & Brownell, 2013; Meule & Gearhardt, 2014a).

Data were collected at locations suitable for the participants, predominantly face-to-face at clinical rooms at Monash University. Four interviews were conducted over the phone because of participants’ distance from the University. The semi-structured interview schedule was based on themes identified in a review of the literature on the potential impacts of the term food addiction upon individuals, their understanding of their eating and weight, self-efficacy in managing these, treatment-seeking behaviours and support for public policies to reduce overweight and overeating. The questions built on previous studies conducted by the authors examining the impact of a brain-based explanations model of addiction (e.g. Carter, Mathews, Bell, Lucke, & Hall, 2014; Lee et al., 2013; Meurk, Hall, Morphett, Carter, & Lucke, 2013). The interview schedule explored: participants’ history of eating and weight, their treatment engagement, stigma experiences, self-perceptions of control and personal responsibility for eating and weight, their views on the causes of weight gain and obesity, and on the effectiveness of treatments and public policies in reducing weight and overeating.

After enquiring about participants’ views about the causes of obesity and weight gain, their explicit attitudes towards food addiction were explored by providing the following statement:
“Scientists have proposed that some foods, particularly those high in sugar and fat, cause changes in the brain that make eating harder to control. They have called this a ‘food addiction’ and believe it may be a cause of obesity in some cases.”

Participants were then asked their views on the impact of food addiction on stigma, treatment seeking, and support for various public policies. This allowed an examination of how a food addiction view of obesity may influence and change opinions.

Recruitment was terminated when data saturation was reached, demonstrated by no new themes emerging from the interviews.

Data Analysis

Interviews were audio recorded, transcribed and analysed using NVivo Version 10 (QSR International) utilising thematic analysis as described by Braun and Clarke (2006). This is an iterative, inductive process that allows the emergence of novel themes from the coding process. The data were analysed according to the six steps (data familiarisation through reading and re-reading transcripts and listening to the audio recordings, initial code generation, searching for themes, reviewing themes, naming themes, and reporting) (Braun and Clarke, 2006).

On average, interviews were 40 minutes long (range: 22-53 minutes) and were conducted by AJC, except the initial interview which was conducted by AC with AJC for training purposes. In accordance with the thematic analysis approach, key phrases were systematically coded, permitting refinement and meaningful interpretation of the large amount of data. Codes were collated on the basis of similarities and differences into a coding structure consisting of primary and secondary themes. An iterative approach was used to identify data that challenged the initial codes in order to refine the
thematic structure, until no new themes were evident (i.e. a “saturation” of themes).

Quality and credibility of results were established using a variety of techniques. This
included two members of the research team (AC, AB) double coding transcript
segments to ensure consistency with the initial coding (AJC), and team meetings (AC,
AJC, AB) to reach consensus in the case of any disagreements.

Results

Of the 23 participants recruited, 17 were female. Participants were aged from 22
to 65 years, with a self-reported BMI from 25 to 47. Slightly more than half the
participants received a food addiction diagnosis according to the YFAS, and more than
half had BMIs corresponding with an obese categorisation (BMI ≥30; see Table 1).
Recruitment from the obesity clinic resulted in five participants (four female, one male),
with the remaining 18 recruited from the online advertisement (13 female, five male).

Table 1. Sample Characteristics

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<th>Participant Information (n = 23)</th>
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<td><strong>Participant Characteristics</strong></td>
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<th>Sample Demographics</th>
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Causes of obesity and weight gain

Views on the causes of overeating and excess weight varied across the sample and within individual interviews. Those recruited from the obesity treatment clinic were particularly aware of the range of causes across their lifetime: “I’ll try to be brief because [my eating and weight are] my whole life story” (F, 65yo, BMI 44, YFAS 6).

Overeating and weight gain were seen as complex biopsychosocial problems. Family upbringing was viewed as causative for some participants: “we always had to finish our meal” (F, 51yo, BMI 32, YFAS 3) while others felt this had no influence. Biological factors, including hormones and genetics, were considered by some to play a role, although they were rarely viewed as the sole cause.

Some participants cited psychological factors, particularly in relation to mood: “[food is an] emotional crutch” (F, 47yo, BMI 27, YFAS 5). Sociocultural factors were also cited: “it’s not as easy to eat healthily as it is to buy junk” (F, 32yo, BMI 33, YFAS 2), “everything’s cheap [and] accessible” (F, 22yo, BMI 26, YFAS 2). Lifestyle factors, particularly sedentary workplaces and stress were also raised as important drivers of excess weight.

Control and Responsibility

Variations in perceptions of control were evident across the sample. Individuals also indicated that their views had changed across their lives. The majority of the sample reported a sense of having lacked control to stop eating. A subset did report

Highest Education 8 7 8

Note. BMI for “Overweight” = 25–29.99, for “Obese” = 30+. A YFAS greater than 3 clinically significant variables is considered to constitute a diagnosis of food addiction (“positive”).
being “very much in control mentally with what I want to eat” (M, 34yo, BMI 25, YFAS 1) and over their weight. Participants' control over their eating was not static; rather, control fluctuated, where periods of successful management were interrupted by lapses leading to a loss of control: “I’ve had one bad thing, what’s another bad thing” (F, 46yo, BMI 39, YFAS 5). Despite reporting a lack of control over their eating, all participants felt responsible for their eating and weight:

“I think [my excess weight] is completely my doing” (F, 32yo, BMI 33, ID05 YFAS 2).

“[People] can overcome a lot of those addictions…I think it all comes down to discipline, education and having a support system.” (M, 34yo, BMI 25, YFAS 1).

Family influence could result in overeating being a habit from early childhood; however, participants stated that habits could be changed and behaviours relearned, suggesting that this perspective did not remove personal accountability.

Some participants highlighted the responsibility of external agencies for both their weight gain and, more broadly, the current obesity epidemic. The government was viewed as failing to support treatments and policies to regulate the content and timing of advertising or food labelling. The medical profession was viewed as responsible for failing to tell participants about healthy eating, the side effects of obesity, and the full range of available treatments.

The participants expressed mixed views about the ways in which a food addiction diagnosis might affect perceptions of control over eating. Some participants felt “food addicts” were able to gain control over their eating and weight though self-
talk and discipline. For others, people with a food addiction were seen as having “less control than other people...they need help” (M, 23yo, BMI 29, YFAS 1).

Removing the sense of control over eating had uncertain consequences:

“I’m not sure [if someone with food addiction has control over their eating]. I don’t know if actually labelling something an addiction is better because it removes stigma and it means that the person is not 100 percent in control. Therefore you don’t blame them so much or you don’t blame yourself. Or if it actually removes the sense of agency because it’s addictive, it’s sort of outside you and you don’t feel so much as if you’ve got control over it. I don’t know if it’s better or worse.” (F, 47yo, BMI 27, YFAS 5).

Acceptance of Food Addiction

There was widespread support amongst participants for the plausibility and relevance of the food addiction concept:

“[Food addiction] is why people crave McDonalds, because of the high fat, the taste” (M, 38yo, BMI 35, YFAS 2). “I know that I’m a food addict” (F, 27yo, BMI 26, YFAS 6).

“I think I am [addicted to food] because of the way I think about food so much” (F, 47yo, BMI 27, YFAS 5).

The majority of participants thought that the term was consistent with their experiences and self-perception:

“I would say that my behaviour towards food is very much [comparable] to the way we describe other forms of addiction. Do you need more of it to get the same effect? Yes. Do you find yourself dependent on it? Yes. Does it affect other
parts of your life? Yes, in the way that you feel...I’m very, very dependent on it and find it very hard to control my use. So yeah, probably I would say I’m addicted.” (F, 22yo, BMI 27, YFAS 7).

Acceptance of the food addiction concept was sometimes seen as only applying to some individuals. It also wasn’t relevant to all foods: “If you tell me that I’m a food addict I’ll be like no...But when you say fat or sugar addicted, it’s true” (F, 32yo, BMI 35, YFAS 5).

However, not everyone interviewed supported the concept of food addiction. Some of those who rejected the concept of food addiction were incredulous at the idea that the normal activity of eating could be an addiction:

“How do you want to define ‘addicted’? I mean I eat every day but so does everybody else, does that mean we’re all addicted? The difference between us is usually quantity. Do I think I’m addicted to food? No.” (F, 56yo, BMI 45, YFAS 1).

This participant scored very low on the YFAS, suggesting that they did not experience addictive patterns of eating. Their rejection of food addiction may reflect their association with food and eating.

Ambivalent views were evident in a few individual responses:

“I wouldn’t describe myself as addicted to food...I would probably consider whoever said that to be not really an expert or not really take their opinion on board so...it wouldn’t really affect me...I think there would definitely be moments in my life that I have probably found it a bit more addictive” (F, 26yo, BMI 30, YFAS 4).
Impact of Food Addiction on Stigma

Self-Stigma. The impact of the food addiction label upon an individual’s self-understanding was a concern for some participants:

“[Being addicted] makes me feel bad about myself … you don’t want to be addicted” (F, 22yo, BMI 27, YFAS 3).

The negative self-attitude was often associated with a sense of lack of control linked to the idea of being addicted:

“I wouldn’t feel very good about [being described as a food addict], it’s like you lose control of something” (M, 27yo, BMI 29, YFAS 4).

Self-stigma outcomes would be positive for some because although the term held negative connotations, it would also be empowering:

“The word addiction… is a terrible word… I’d be devastated but… I’ve got a name to it. I can work with it” (F, 52yo, BMI 45, YFAS 2).

Perceptions of External Stigma and Control. The manner of introducing the food addiction concept needs to be handled carefully in order to minimise expected stigma from external sources, such as colleagues, family, and friends:

“[Diagnosing] needs to be sensitive because [obesity is] already stigmatised, so it could get worse” (F, 22yo, BMI 27, YFAS 7).

This included stigmatisation by health care professionals. Many respondents described experiencing discrimination from their treating physicians, which they thought had adversely affected their eating and weight.
The lack of control associated with addiction was believed to lead to increased stigmatisation:

“People still have stigma attached to drug addiction and alcohol addiction…everyone has that ‘I’m better because I can control it’ kind of attitude” (F, 43yo, BMI 45, YFAS 3).

Respondents believed they would feel greater external pressure to gain control over their eating and weight if it was described as a food addiction. They believed others would see their eating as a willing choice and under individual control.

“If we throw the addict label on obese people then people might perceive that as them trying to find an excuse for their behaviour when it’s really their fault” (F, 22yo, BMI 27, YFAS 7)

**Impact of Food Addiction on Treatment-Seeking**

Some participants though that a food addiction diagnosis may have a positive impact on treatment-seeking, motivating the search for external support:

“I like to try and figure out ways I can cope with these sort of things on my own first. But maybe [a food addiction diagnosis] might tip me over the edge to go and see someone” (M, 27yo, BMI 29, YFAS 4).

**Treatment Effectiveness.** Psychological services were seen as critical in treating the triggers and behavioural aspects of a food addiction. Education about addictive foods and dietician support would help to change eating behaviours. The addiction label did not appear to lead to the view that excess weight and eating were harder to overcome.
Pharmaceutical and surgical treatments of food addiction were viewed as largely ineffective and “too extreme” (M, 23yo, BMI 26, YFAS 6):

“Medications might help in the short-term, in the long-term, I don’t want to be taking pills for the rest of my life” (M, 23yo, BMI 29, YFAS 1).

Despite often viewing medical treatments as ineffective, some participants felt they had been pushed by their GPs towards medicalised options, particularly surgery. There were some notable exceptions, crucially for one participant who had been struggling to follow medical recommendations for many years and was scheduled for lap-band surgery soon after the interview:

“I’ve been dead against like having lap band surgery…maybe if 10 years ago someone would have said to me you’re a food addict and this is going to help you stop that addiction to some point, I might’ve taken it a bit more seriously 10 years ago.” (F, 43yo, BMI 45, YFAS 3).

Impact of Food Addiction on Public Health Policy

Regulation. Participants were largely sceptical about whether restrictions on the availability of certain foods, such as bans on large takeaway soft drinks, would be effective:

“[Restrictions] would probably help but if the person really wants a Coke every day, they would probably find the means to get it.” (M, 23yo, BMI 29, YFAS 1).

There was greater support for restrictions aimed at children:

“Maybe it’s not for me, maybe it’s for my children” (F, 43yo, BMI 45, YFAS 3).
Taxes. Similarly, taxes were supported to tackle food addiction, although generally without an expectation that they would change participants’ or other “food addicts’” behaviour. However, some respondents reported their purchasing of processed foods would be directly impacted:

“[Taxes] would make you think twice about buying it, and rather than having something high in sugar and fat and processed, to go for something that’s more natural and healthy” (F, 51yo, BMI 32, YFAS 3).

Benefits were expected at a manufacturing level, with taxes and regulations to minimise the proportion of refined sugars and fats in food perceived as a promising option.

Those critical of taxation argued that these policies did not directly support individuals or their perceived lack of control over eating:

“If people haven’t got control over it then adding taxes isn’t going to stop them from doing it… I look at other addictions and I think… it’s not their fault that they do it. It’s their coping mechanism for life and making it more expensive isn’t going to make their life any better” (F, 43yo, BMI 45, YFAS 3).

There was more support for reductions in the price of healthy foods. Respondents felt this would increase accessibility, and thereby reduce purchases of highly palatable and processed foods on the basis of affordability:

“I think they’d be better off lowering prices on healthy foods as much as try and increase prices on unhealthy foods… making it easier for people to access” (F, 32yo, BMI 33, YFAS 2).
Education Campaigns. Education campaigns about food addiction were seen as effective in improving eating and weight. Specific recommendations for programs were identified, placing particular importance upon educating children:

“Kids tend to follow other kids…educating the children is very important” (F, 52yo, BMI 45, YFAS 2).

Positive experiences with small-scale programs included parents and children learning about eating and its impact on the body:

“They took them on a shopping trip and told them about everything at eye level was the fattier or more sugary…so you had to look above…and how to read the ingredient list” (F, 22yo, BMI 26, YFAS 2).

Education programs that were practical and community based—for example neighbourhood houses for teaching growing and cooking healthy produce—were particularly supported.

Discussion

Support for Food Addiction

Surveys reveal widespread acceptance of the concept of addictive foods among the general public, with over 80% believing that some foods can be addictive (Lee et al., 2013). However, there has been almost no research on the perspectives of overweight and obese individuals—those most likely to be affected by the growing use of the label. In the present study, the concept of food addiction was well supported by participants but to different ways. Food addiction was seen as only applicable for some individuals or some types of food, such as sugar and fat. Despite supporting the concept, some participants rejected the “addict” label. Although the food addiction model was
endorsed by most participants, the term “food addiction” itself was viewed as problematic or potentially harmful (Hebebrand et al., 2014), on the basis that it could lead to adverse consequences, such as the internalisation of the “addict” stereotype. These findings are consistent with those of several quantitative studies of the public acceptance of food addiction, in which participants believed some cases of obesity were a form of addiction with compulsive elements (Lee et al., 2013; Malika, Hayman, Miller, Lee, & Lumeng, 2015).

Impact of Food Addiction on Perceptions of Control and Responsibility

Paradoxically, for some participants, acceptance of the idea that they might be food addicted was associated with an increased sense of control over eating and weight. Despite “lack of control” being a defining characteristic of addiction in The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013), these participants expressed the view that both they themselves and others with a food addiction retained control of their eating. Other participants, however, took the opposite view: that people with a food addiction had less control over eating than others. Nonetheless, all respondents, including the most severely obese and those planning bariatric surgery, believed that they were ultimately responsible for controlling their eating and losing weight. Viewing their behaviour as the result of an addiction did not remove the sense of responsibility for becoming overweight or losing weight. This is consistent with recent research with drug addicted individuals (Carter et al., 2014; Meurk et al., 2016).

Perceptions of control and responsibility have implications for clinical and social responses to addicted individuals. The high perceptions of control expressed by our participants aligns with the views of many Australian clinicians that addicted
individuals retain high control over their drug use (Carter et al., 2014). This shared understanding that high control is a hallmark of addiction may be utilised to enhance engagement with help-seeking resources, such as psychological counselling through discussion between patients and clinicians to extend the high control over behaviours into control and responsibility over treatment-seeking behaviours.

**Self and External Stigma**

There is debate in the literature about whether the use of a food addiction label would decrease personal blame by demonstrating it was outside an individual’s control (Latner et al., 2014; Pearl & Lebowitz, 2014) or would rather heighten stigma by encouraging the view that overweight people are diseased (Puhl & Heuer, 2009). The present findings suggest that a diagnosis of food addiction would be more likely to reduce self-blame. A food addiction model of excess weight, however, would also be likely to increase the perceived level of stigma from others. Despite acknowledging that they experienced some foods as addictive, some participants did not wish to be described as “addicted” because they were acutely aware of the stigma attached to drug addiction.

Recommendations and practical implications include a focus upon education and acceptance. Teaching children about the variability of weight was expected to reduce stigma by improving acceptance. This aligns with a growing body of research suggesting that the best way to reduce stigma is through normalisation, demonstrating that people with an illness are just like everyone else (Corrigan & Shapiro, 2010).
Association between Stigma and Treatment-Seeking

Participants indicated that food addiction was a hurtful term and would increase their experience of external stigma. However, contrary to speculations that this may undermine treatment seeking and outcomes (Drury & Louis, 2002; Wott & Carels, 2010), many participants thought that this negative self-perception would most likely increase their motivation toward treatment-seeking. Some individuals, particularly in the media, have argued for “fat-shaming” – the deliberate stigmatising of overweight individuals – to motivate weight loss (Levinovitz, 2015). The findings of this study, however, do not support such an approach but rather suggest that messages about food addiction should focus simultaneously on reducing stigma while encouraging treatment-seeking and lifestyle changes.

The increased motivation to seek treatment may be the result of self-stigma, which mediates the relationship between external stigma and psychological treatment-seeking (Vogel, Wade, & Hackler, 2007). The internalisation of weight-bias is known to lead to greater utilisation of healthcare services aimed at weight reduction (Hilbert, Braehler, Haeuser, & Zenger, 2014). During interviews, some participants reported finding the addiction term useful for clarifying the root causes of their overeating, for enhancing understanding of their experiences and for increasing access to support resources. Although food addiction may not decrease perceptions of external stigma, it may heighten engagement with services by shifting attention towards education about eating, control and behaviour.

Impact of Food Addiction on Treatment Choice

The present findings suggest that a food addiction diagnosis may encourage overweight and obese individuals to seek psychological counselling, contrary to their
previous intentions. These findings suggest research is needed to precisely identify
those most likely to benefit from such therapy, development of professional
development programs for clinicians, and funding to subsidise these services as
affordability was described as a barrier for many participants.

Participants believed that General Practitioners (GPs) should spend more time
discussing treatment options and be more prepared to refer to psychologists and
dieticians. They felt that there was an excessive focus on medical and surgical
interventions. There also need to be enhanced education and awareness campaigns to
reduce stigma and discrimination experienced by overweight individuals during the
clinical consultation. Stigma and discrimination by treating physicians was also viewed
as adversely affected eating and weight. It is not clear what impact promotion of the
concept of food addiction as a cause of obesity would have on clinicians and their views
of overweight persons. As with other addictions, primary care physicians are ideally
placed to recognise and diagnose, as well as to direct and monitor, treatment (Leshner,
1999). There is a clear need for further research into the views and attitudes of GPs and
other healthcare professionals towards food addiction in order to inform the
development of programs aimed at reducing stigma experienced by overweight patients.

A food addiction model did not appear to increase participants’ interest in
pharmaceutical or surgical treatments, including those scheduled for bariatric surgery, as
some have feared. These findings align with previous evaluations which suggest that
acceptance of food addiction may not produce an overreliance upon medical procedures
(Lee et al., 2013). This motivation may be hindered by a lack of proven efficacy for
psychological interventions. Despite evidence that psychological counselling can help
achieve modest sustained weight-loss (McTigue, 2003), and assist with better outcomes
after bariatric surgery (Saunders, 2004), evidence for enduring treatment outcomes from psychological interventions for obesity is generally lacking (Carter & Jansen, 2012). Overweight and obese people should be educated about this mixed evidence, and improvements in available psychological interventions supported. Efficacy may be improved by drawing upon existing understandings of addiction treatments.

**Public Policy**

The impact of a food addiction model on society-wide public-health strategies remains uncertain. The present study found that among overweight and obese individuals the food addiction model increased support for policies in support of regulating the sale and advertising of high sugar and/or fat foods. This contradicts evidence on the lack of support in the Australian and American public for population level public policies (e.g. taxes, advertising bans) among those who accepted a food addiction model of overweight and obesity (Lee et al., 2013). However, the general public appears more supportive of public health policies targeted at children and adolescents (Evans, Finkelstein, Kamerow, & Renaud, 2005), as was the case among participants in the present study.

Even among those of our participants who supported population level policies, many believed that taxes and regulations would not influence their purchasing behaviour or consumption. However, similar reports among tobacco smokers (Morphett, Partridge, Gartner, Carter, & Hall, 2015; Uppal, Shahab, Britton, & Ratschen, 2013) are not supported by empirical data which show that increased taxes reduce tobacco use (Pierce, Gilpin, & Emory, 1998; White, 2003). This paradox in tobacco policy creates the potential for the food addiction model to justify excise or manufacturing taxes on products high in sugar or fat (Gearhardt, Bragg, et al., 2012; Miao, Beghin, & Jensen,
2012), which are predicted to reduce both consumption and weight (Andreyeva, Chaloupka, & Brownell, 2011; Finkelstein et al., 2013).

Participants were more supportive of policies to reduce the availability and affordability of high sugar and fat foods, normalise smaller portion sizes of processed foods, and restrict or ban advertising of certain foods when these policies were aimed at children. This mirrors findings in tobacco control policy (Edwards et al., 2012).

Participants also preferred policies that reduced the cost of healthy foods, on the basis that these would increase their accessibility. Our findings are consistent with demonstrated public preferences for educational campaigns over government regulation in reducing obesity (Oliver & Lee, 2005). Practical recommendations of respondents included school-based education on the interpretation of food labels. Such suggestions are easily implemented and their effectiveness should be further investigated.

**Limitations and Future Directions**

Our sample was predominantly female, possibly skewing attitudes towards food addiction, its impact on stigma—particularly given that women experience greater weight based discrimination—and responses towards support for taxes and regulations (Evans et al., 2005; Oliver & Lee, 2005). Future research should include a quantitative survey sampling a greater number of overweight and obese people to assess the relative prevalence of the present views in the general population.

People’s self-reported attitudes may not reflect their actual behavioural responses. This study should be supplemented by behavioural choice experiments that examine the impact of a food addiction label or diagnosis on people’s actual behaviour, such as their food choices and other health related behaviours.
Further qualitative research is required involving healthcare professionals, particularly GPs, psychologists, and dieticians. Participants perceived their GPs to be unwilling to raise the issue of weight or to discuss non-medical treatments. The latter were also seen as the cause of significant stigma and discrimination that participants believed adversely affected their eating and treatment. An in-depth understanding is needed about the challenges GPs face in meeting these expectations. Research is required to ensure these professionals are sufficiently trained to meet the needs of this population and to develop successful clinical treatment programs.

Conclusion

The present study builds on research about community opinions regarding a food addiction approach by directly examining the viewpoints of overweight and obese individuals - those who would be most affected by its widespread utilisation. The presence of a behavioural substance use disorder, involving foods high in sugar or fat, was widely accepted. Self-stigma was highly motivating towards treatment-seeking, especially psychological counselling, and appropriate training of psychologists is crucial. Participants, however, were no more interested in medical options in light of a food addiction model of overweight and obesity. Additionally, introducing public health campaigns such as taxes and regulations is likely to receive the most support if undertaken to protect children, a lesson learnt from the history of tobacco policy.

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