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"There is no way to avoid the first bite": A qualitative investigation of addictive-like eating in treatment-seeking Brazilian women and men

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1. Introduction

The controversial construct of addictive-like eating has received increasing attention in recent years (Meule, 2015), generating a great deal of theoretical debate (e.g., Lacroix, Tavares, & von Ranson, 2018; Schulte, Potenza, & Gearhardt, 2018). Consensus on a definition of this construct has not yet been reached: researchers have posited that addictive-like eating could be conceptualized as a substance use disorder (SUD; Schulte, Potenza, & Gearhardt, 2016a), behavioural addiction (Hebebrand et al., 2014), severe form of binge eating disorder (BED; Davis, 2013), or within a transdiagnostic spectrum of overeating (Piccinni et al., 2015; Vainik, Neseliler, Konstabel, Fellows, & Dagher, 2015). Evidence of similarities between food and drugs of abuse has been cited as support for the substance-based food addiction perspective (Schulte, Potenza, & Gearhardt, 2016b), yet there exist many important qualitative and quantitative differences between addictive-like eating and substance use (Long, Blundell, & Finlayson, 2015; Ziauddeen, Farooqi, & Fletcher, 2012). Furthermore, research in this area has been criticized for conflating the construct of addictive-like eating with its most commonly used self-report measure (Long et al., 2015), the Yale Food Addiction Scale (Gearhardt, Corbin, & Brownell, 2009). Alternative measures of addictive-like eating have been developed, such as the Addiction-Like Eating Behaviour Scale (AEBS; Ruddock, Christiansen, Halford, & Hardman, 2017) and the Reward-Based Eating Drive Scale (RED-13; Mason et al., 2017). Because the majority of research on addictive-like eating relies exclusively on self-report questionnaires, accurate assessment is the foundation upon which our understanding of this construct rests. However, in the absence of an agreed-upon definition of this construct, it is unknown to what degree these

self-report questionnaires capture individual experiences with the complex phenomenon of addictive-like eating.

To reach a valid and clinically useful definition of addictive-like eating and facilitate accurate assessment of this construct, there is a need for qualitative research to help generate hypotheses and contextualize the construct within individual experiences. An emerging qualitative literature has examined individual experiences and perspectives on food addiction from English-speaking countries. First, a recent study conducted by Cullen et al. (2017) in Australia interviewed 23 participants recruited through online advertisements and an obesity clinic. Level of support for the food addiction construct varied: although many participants identified with the "food addict" label, some rejected this label due to its potential to increase stigma, whereas others indicated that they viewed food addiction as only applicable to certain individuals or types of foods. Second, Malika, Hayman Jr., Miller, Lee, and Lumeng (2015) interviewed 61 low-income mothers in the United States, and found that participants viewed food addiction as more severe than commonly experienced cravings for specific foods, and entailed a "compulsive need to have certain foods all the time". Third, Ruddock, Dickson, Field, and Hardman (2015) conducted an open-ended survey study in the UK in which members of the lay public discussed their conceptualizations of food addiction. The themes identified in these descriptions were reward-driven eating, preoccupation, lack of control, food cravings, increased weight or unhealthy diet, and a problem with a specific type of food. Fourth, Van Ostrand (2015) interviewed six Canadian women recruited from a 12-step program for food addiction. These women described frequent food cravings and felt their experiences were well-captured by an addictive disorder framework, a finding which could be expected given that participants were members of a support group which subscribed to such a framework.

Qualitative and quantitative research to date has improved our understanding of addictive-like eating. However, all known qualitative studies have been conducted in Canada, Australia, the UK, and the United States. Little is known about experiences of addictive-like eating among individuals living outside of the Anglo-Saxon world, or how well these experiences are captured by existing measures and conceptualizations of addictive-like eating. Given that important cross-cultural differences have been found in eating disorders (Becker, Burwell, Herzog, Hamburg, & Gilman, 2002; Forbes et al., 2012; Miller & Pumariega, 2001), alcohol use (Kuntsche et al., 2006), and gambling disorder (GD; Medeiros et al., 2015), cross-cultural differences may likewise exist in how people experience addictive-like eating. Furthermore, given that all known qualitative studies have focused on non-clinical populations, little is known about the experiences of individuals seeking treatment for addictive-like eating.

Operationalizations of addictive-like eating should ideally capture the full range of experiences with this phenomenon, providing a valid and comprehensive measure of the construct they are attempting to assess. When questionnaires are intended for use with non-Anglo-Saxon individuals and treatment-seeking populations, it is important that they reliably and validly measure the construct in these populations, a goal which necessitates exploring and understanding diverse manifestations of addictive-like eating. Although quantitative, questionnaire-based studies are be useful in gauging the prevalence of certain symptoms among various populations, these methods may provide limited insights at the stage of construct conceptualization. Specifically, if a key feature of addictive-like eating was not well-captured by existing questionnaires, quantitative methods would not identify this feature or allow it to be integrated into definitions of addictive-like eating. Thus, a critical next step for qualitative research is to describe experiences among clinical populations and individuals outside the Anglo-

Saxon world, and to gauge how well these experiences are captured by pre-existing conceptualizations and operationalizations of addictive-like eating.

To expand understanding of experiences of addictive-like eating in different cultures and settings, it is important that researchers who conduct such qualitative analyses avoid as much as possible the tendency to code and interpret data through the lens of preconceived views on what addictive-like eating is and isn't. Instead, by letting the data guide analysis, themes may arise more naturally out of the experiences and views that seem most important and common among participants. Rather than letting pre-conceived conceptualizations of addictive-like eating determine which themes to present and omit at the data analysis stage, emergent themes may later, at the interpretation stage, be compared and contrasted with current understandings, in order to gauge the applicability of these understandings to various samples.

The present study employed interviews and thematic analysis to explore how Brazilian women and men seeking treatment for addictive-like eating experienced and conceptualized this eating pattern. We sought to answer the following research questions:

1. How do individuals experience and conceptualize the construct of addictive-like eating?
2. Which features stand out as key components, i.e., most important and commonly reported, of addictive-like eating in these individuals' descriptions?
3. What kind of consequences, i.e., distress and impairment, if any, do individuals experience as a result of their addictive-like eating?
4. To what degree do these individuals' experiences align with previous findings?
5. How well do current conceptualizations and operationalizations of addictive-like eating capture the experiences of treatment-seeking individuals outside the Anglo-Saxon world?

After extracting themes from participant interviews using a data-driven approach, we contextualized participant experiences and conceptualizations in the discussion section by

considering their consistency with previous studies, and the degree to which they are captured by existing assessment measures. Adding to understandings of how individuals define and experience addictive-like eating may help ensure that conceptualizations, definitions, and operationalizations of this construct capture its diverse clinical manifestations, facilitating valid assessment and the development of effective treatments. Such research may also provide directions for future construct definition and scale development research, generating hypotheses regarding the nature of addictive-like eating to be tested on a larger scale.

2. Method

2.1 Participants

Seven men and eight women seeking treatment for food addiction were recruited through a psychiatric institute in a major Brazilian city. Participants received referrals to the food addiction treatment program through the institute's outpatient impulse control disorders unit. A purposive sampling approach to recruitment (Creswell, 2014) was employed to ensure that the sample included men and women with diverse clinical treatment histories and a broad range of experiences with addictive-like eating.

At the time of participation in our study, two participants had completed group treatment for food addiction, three participants were currently receiving treatment (having attended ten, six, and two sessions, respectively), and the remaining 10 participants were on the waitlist to receive treatment. The intervention provided through the Impulse Control Disorders unit was comprised of 21 weekly group sessions of 90 minutes each (Oliveira et al., 2018): six sessions focused on nutrition and psychoeducation; three sessions employed motivational interviewing to increase readiness for change; and 12 sessions employed schema therapy, an approach which emphasizes clients' emotional experience, therapeutic relationship, and life experiences, integrating elements of cognitive-behavioural therapy with other techniques. Patients were also

independently evaluated by psychiatrists at the outpatient unit who prescribed psychotropic medication at their own discretion.

All participants provided written informed consent, were aged 18 years or older, able to write in Portuguese, and able to attend treatment sessions for two hours weekly for 21 weeks. Exclusion criteria were: psychotic disorder, current acute episode of mania, or intellectual disability, as assessed by a psychiatrist.

2.2 Measures

Two questionnaires were administered for descriptive purposes, to provide an index of our participant's food addiction and eating pathology symptoms.

2.2.1 Yale Food Addiction Scale. Food addiction symptoms were assessed using the Yale Food Addiction Scale Version 2.0 (YFAS; Gearhardt et al., 2009; Gearhardt, Corbin, & Brownell, 2016). The YFAS is based on criteria for substance dependence from the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013). The YFAS has 35 items scored on a Likert scale from 0 (*Never*) to 7 (*Every day*), and yields a continuous symptom count/total score (which was used for the present study), and categorical "diagnosis" of food addiction (None = 1 or fewer symptoms, and/or does not meet criteria for distress or impairment; Mild = 2 or 3 symptoms and distress and/or impairment; Moderate = 4 or 5 symptoms and distress and/or impairment; Severe = 6 or more symptoms and distress and/or impairment). In samples of crowdsourced participants, this version of the YFAS has shown evidence of strong internal consistency, convergent validity, and discriminant validity (Gearhardt et al., 2016); in samples of undergraduates, it has also demonstrated measurement invariance across gender and race (Carr, Catak, Pejsa-Reitz, Saules, & Gearhardt, 2017). The YFAS was translated into Brazilian Portuguese by the second author of the present study, back-

translated into English, and checked for consistency by two Portuguese native speakers fluent in English and a psychiatrist with expertise in food addiction.

2.2.2 Questionnaire on Eating and Weight Patterns - Revised. Participants completed the Portuguese version of the Questionnaire on Eating and Weight Patterns-Revised (QEWP-R; Borges, Morgan, Claudino, & Silveira, 2005), a screening tool for binge eating, BED, and bulimia nervosa (BN). It includes 28 dichotomous questions to assess overeating and loss of control, distress, importance of weight and shape, and compensatory weight control behaviors. Per DSM-IV criteria for BED, a participant must endorse at least two binge eating episodes per week associated with significant distress, in the absence of regular inappropriate compensatory methods for weight control. The QEWP-R has demonstrated good discriminative validity (Nangle, Johnson, Carr-Nangle, & Engler, 1994) and concordance with Structured Clinical Interview for DSM-IV (First, Spitzer, Gibbon, & Williams, 2012) BN and BED diagnoses.

2.3 Procedure

Ethics approval was obtained from the University of Calgary Conjoint Faculties Research Ethics Board and the ethics committee of the University of São Paulo Department of Psychiatry. Treatment eligibility did not depend on participation in the present study, and was determined separately. Recruitment was terminated when theoretical saturation was reached, defined as "the point when no new insights are being discovered in observations" (Gilgun, 1992, p. 117). All measures and interviews were administered in Brazilian Portuguese. The interview guide (see Table 1) was developed in alignment with recommendations for qualitative research from Creswell (2014) and Kallio, Pietilä, Johnson, and Kangasniemi (2016). To address study aims and knowledge gaps identified in our review of the literature, interview questions invited participants to describe their conceptualization of, and experiences with, addictive-like eating. Accordingly, questions were grouped into the following themes: personal experience,

conceptualization, distress and impairment, and coping. The questions were were meant to be clearly worded, open-ended, and not leading (Kallio et al., 2016), with some exceptions. Namely, questions 9 through 12 were quite direct, with the aim of addressing specific knowledge gaps regarding distress and impairment; and question 4 aimed to link participants' experiences to an important ongoing debate regarding whether addictive-like eating should be conceptualized within a substance use disorder or behavioural addiction framework (Lacroix et al., 2018). The interview guide was meant to serve as a loose framework that could adapt to participant responses, allowing for flexible dialogue and changing of question order during the interview.

Table 1

Semi-structured interview guide

Personal experience
1. Tell me about your experience with food addiction.
2. What does it feel like to be addicted to food/eating?
3. What are your general eating patterns like?
4. Do you think that you are addicted to specific foods, or do you think it is the behaviour of eating that is addicting?
5. How would you know if you were *not* addicted?
Conceptualization
6. How would you define addiction to food or eating?
7. Many people experience cravings for certain foods. What do you think is the difference between normal cravings and addiction?
8. What is it that makes you think you are addicted?
Distress and Impairment
9. Has your experience with food and eating interfered with your daily life? How so?
10. Has your experience with food and eating affected you emotionally?
11. Has your experience with food and eating affected your social life?
12. Has your experience with food and eating affected you professionally?
Coping
13. How have you been coping with these issues?
14. Do you have suggestions for other people who are coping with similar issues?

Interviews were conducted face-to-face, and took place in clinical rooms at a research and treatment center affiliated with the University of Sao Paulo Psychiatry Department. Mean interview duration was 32 minutes (range = 22–51 minutes). The main interviewer was a Brazilian registered psychologist with a Master's degree equivalent and training in the subject area; the first author was present for all interviews and occasionally directed and clarified questions and responses. Interviews were audio recorded and transcribed by native Portuguese speaking research assistants, and transcripts were compared to recordings to check for accuracy. Subsequently, the interviews were translated into English by the main interviewer and first author.

2.4 Data Analysis

Data analysis was conducted by the first author using both the original Brazilian Portuguese interview transcripts and their English translations. Transcripts were analyzed using thematic analysis, a qualitative analytic method described by Braun and Clarke (2006). Thematic analysis is defined as "a method for identifying, analyzing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79). Themes represent patterned responses or meaning, and capture important aspects of the data in relation to the research question (Braun & Clarke, 2006). There are two primary approaches to thematic analysis. First, an inductive or 'bottom up' approach means the themes identified "are strongly linked to the data themselves" and "may bear little relation to the specific questions that were asked of the participants" (Braun & Clarke, 2006, p. 83). This approach strives to avoid applying the researcher's preconceived theoretical framework at the data analysis stage. Alternatively, researchers may employ theoretical thematic analysis, a 'top down' approach that describes and codes data into preconceived themes or seeks to identify specific features in the data. We took an inductive or 'bottom up' approach to data analysis, while recognizing that it is impossible for researchers to completely abandon their theoretical preconceptions (Braun & Clarke, 2006). We did not seek to completely abandon these theoretical preconceptions, but rather, to delay applying them to our data until after data analysis was complete.

Our inductive thematic analysis proceeded in the following steps outlined by Braun and Clarke (2006): 1) Familiarizing oneself with the data through reading, re-reading, noting initial impressions of the data and potential theme ideas; 2) Generating initial codes across the entire data set; 3) Searching for themes and gathering data relevant to each theme; 4) Reviewing themes and generating a thematic 'map' of the analysis; 5) Defining and naming themes; and 6) Selecting examples and producing of the report. Entire interview transcripts were coded using

NVivo Version 11.4 (QSR International) to facilitate the identification of themes and collation of all relevant extracts for each theme. In identifying themes and selecting which to include, we aimed to let the data guide us in choosing the themes that appeared most often as well as most important to participants. In the discussion section, we then link themes to our research questions and the broader literature, discussing how participants' descriptions relate to current understandings and operationalizations of addictive-like eating.

3. Results

Participant demographic and clinical information is presented in Table 2.

Table 2

Participant characteristics

	Composition	Range	Mean	SD
Gender				
Female	8 (53.3%)			
Male	7 (46.7%)			
Age		30 – 69	46.60	11.39
Ethnicity				
White	12 (80.0%)			
Black	2 (13.3%)			
Mixed	1 (6.7%)			
Marital status				
Married	10 (66.7%)			
Single	4 (26.7%)			
Other	1 (6.7%)			
Employment status				
Employed full-time	6 (40.0%)			
Employed part-time	2 (13.3%)			
Homemaker	2 (13.3%)			
Unemployed	5 (33.3%)			
Highest education				
University	12 (80.0%)			
Some university	2 (13.3%)			
High school	1 (6.7%)			
Household income (Brazilian Reals/year)		14,000 – 504,000	119,285.71	134,941.96
BMI (kg/m^2)		25.71 – 43.82	35.43	4.66
Obese (BMI > 30 kg/m^2)	13 (86.7%)			
YFAS				
Symptom count		2 – 11	9.13	2.67
Food addiction	10 (66.7%)			
QEWP-R				
Binge eating episodes	7 (46.7%)			
Binge eating disorder	6 (40.0%)			
Bulimia nervosa	0 (0.0%)			

Note. BMI = Body mass index. YFAS = Yale Food Addiction Scale. QEWP-R = Questionnaire on Eating and Weight Patterns – Revised.

Of the 15 participants, eight (53.3%) were female. Participants were aged from 30 to 69 years of age (M = 46.60, SD = 11.39). Twelve participants identified their ethnicity as white, two identified as black, and one participant identified as mixed race. Modal education level was high,

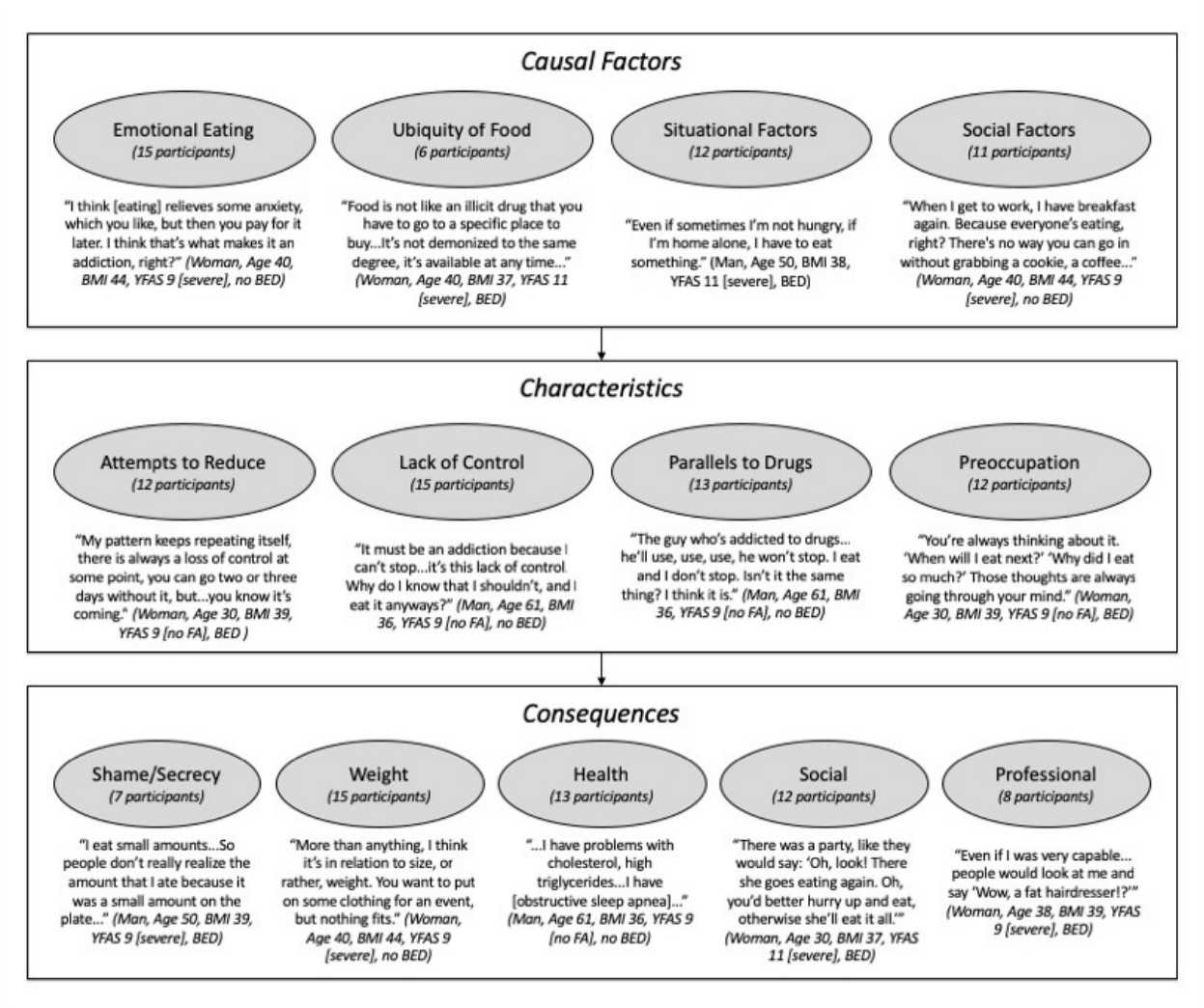
with the majority of participants having completed university. Reported annual household income varied substantially, from 14,000 to 504,000 Brazilian Reals (BRL); the median income was 84,000 BRL (approximately $25,300 USD). One participant did not disclose their income.

Self-reported BMI ranged from 25.71 kg/m^2 to 43.82 kg/m^2 (M = 35.43, SD = 4.66); 13 (86.7%) had BMIs corresponding to an obese categorization (BMI > 30 kg/m^2). YFAS symptom count ranged from 2 to 11 (Mean = 9.13, SD = 2.67), and 10 participants (66.7%) met YFAS criteria for food addiction. Seven participants self-reported binge eating episodes, six met QEWP-R criteria for BED, and none met criteria for BN. Participants who did not endorse binge eating episodes described a pattern of continuous overeating or “grazing” throughout the day.

A thematic map (Figure 1) presents an overview of our qualitative results.

Figure 1

Thematic map



Note. This theoretical map depicts the causal factors, characteristic features, and consequences of addictive-like eating derived through thematic analysis of interview transcripts. For each theme, the number of participants (out of a possible 15) who described it is denoted in italics below the theme name, along with an illustrative quote.

3.1 Characteristics of Addictive-Like Eating

Pseudonyms are used to protect participant confidentiality. Four key themes were identified from participants' descriptions of their definitions and experiences of addictive-like eating.

3.1.1 Lack of control. All participants in this study identified lack of control as a central component of their experience with addictive-like eating. Claudia (37-year-old woman, BMI 25.71 kg/m^2, YFAS 11 [severe], no BED), when asked how she would define addiction to food or eating, described it as "Not having control over the amount that I eat, not being able to stop when I'm satiated, and doing it over and over again."

When describing their eating patterns, participants tended to emphasize difficulty stopping once they had begun eating, rather than difficulty controlling the original impulse to begin eating. Many participants stated that if they opened a package of food and began to eat, they would be unable to stop until becoming physically ill or finishing the package: "It's like, eating sweets until you can't eat anymore. You can't just have the one, you keep going. So there's this...this inability to stop, like, until you reach the end" (Mariana, 40-year-old woman, BMI 43.82 kg/m^2, YFAS 9 [severe], no BED). The drive to continue eating once having begun seemed to be experienced as a strong force outside of participants' control, which Cintia (38-year-old woman, BMI 39.26 kg/m^2, YFAS 9 [severe], BED) termed a "chain reaction of eating."

3.1.2 Preoccupation with food and eating. The second characteristic that was present in descriptions of addictive-like eating were persistent thoughts and constant preoccupation with food and eating: "You think about it the whole time. 'When will I eat next?' 'Why did I eat so much?' Those thoughts are always going through your mind. Food, food, food." (Ana, 30-year-old woman, BMI 38.53 kg/m^2, YFAS 9 [food addiction criteria not met], BED). Thoughts about food were not only persistent, but in some cases, distorted. For example, Marinalva (30-year-old

woman, BMI 36.67 kg/m^2, YFAS 11 [severe], BED) described a fear of never having the chance to eat again, which she recognized was irrational:

> It's as if I'm scared of getting hungry, as if I were afraid of being underfed...as if I wouldn't be able to eat, or as if this could be the last time I would ever get the chance to have a certain food. That's the way I feel. For example, if I buy...if there are sweets at home, I know that they're there, I'll want to eat them now, because I don't know whether I'll ever get the chance again...I don't know whether or not I'll wake up again and get the chance to eat...That's the way I feel. I don't know if it's an anxiety issue, thinking that maybe I won't get to eat that food again, that maybe I won't ever have the chance.

With a laugh, Cintia commented that her thoughts about food persisted during the interview: "I'm sitting here talking to you and I'm thinking, "God, I'm hungry." I'm going to leave here and stop by a bakery and buy something to eat, I'm thinking I'll go have something sweet."

3.1.3 Repeated attempts to reduce eating. Twelve participants expressed frustration that they had tried many times change their eating patterns or lose weight, with no long-term weight loss: "There was a series of attempts to lose the weight without...sometimes with success, I would lose 15, 20 kilos, but later I would gain it back." (Pedro, 50-year-old man, BMI 39.26 kg/m^2, YFAS 9 [severe], BED). Ana described her pattern of restriction and avoidance of certain foods, which would eventually end with binge eating:

> What I see is that my pattern keeps repeating itself, there is always a loss of control at some point, you can go two or three days without it, but on the fourth day, you know it's coming. On the fifth day, you know it is. At some point, you know it will be back. You try to...to be restrictive, saying, "No thanks," avoiding, avoiding, avoiding. But then a day comes when you're like, "No, I can't take it anymore," and you eat everything.

Repeated attempts to change eating habits appeared to reinforce participants' sense of not being in control. For Claudia, these repeated unsuccessful attempts, which she termed "relapses," lead to a great deal of distress: "I had a breakdown and started crying because I was like, 'Oh, I suffered so much to lose 5 kilos and I had another relapse.' And it was very hard, because I spent four days crying and...like, super depressed." Other participants, like João (43-year-old man, BMI 31.67 kg/m^2, YFAS 10 [severe], BED), felt drained by their repeated attempts to reduce their eating: "I would even say that in relation to this food thing, I'm exhausted. I'm worn out. That's the way it is."

3.1.4. Parallels to substance use disorders. Thirteen participants suggested that addictive-like eating was akin to a SUD, or otherwise drew parallels between these problems. Claudia made this comparison explicitly, stating "You get addicted to sweets the same way you are addicted to any other drug. Alcohol, cigarettes." Other participants, like Mariana, mentioned withdrawal symptoms to illustrate this parallel: "I work with alcoholics, and I'd say it's the same thing. The symptoms they have, the symptoms they describe when they don't drink, it's like the same thing." Franco (61-year-old man, BMI 35.66 kg/m^2, YFAS 9 [food addiction criteria not met], no BED) emphasized that the similarity between eating and substance use lay in the inability to stop the behaviour: "The guy who's addicted to drugs...he'll use, use, use, he won't stop. I eat and I don't stop. Isn't it the same thing? I think it is. I think it is."

Seven participants described prior experience with alcohol or substance misuse, and described engaging in addiction substitution, the process of replacing one addictive behaviour with another:

> I developed a drinking problem, and then I substituted one thing for another. I went to AA, it was great. Today I am able to drink responsibly. But I realized that I'm addicted to food. I just substituted one thing for the other. (João)

3.2 Factors that Influence Eating

3.2.1 Cycle of emotional eating. All participants mentioned that emotions played a role in their addictive-like eating. Ana, like several other participants, described overeating in response to intense emotions, no matter what their valence:

> It's more feeling too much of anything that leads to this loss of control for me. For example, feeling too tired, an excess of happiness, an excess of sadness, of whatever feeling, that's when I seem to lose control the most. If I'm with some friends, and I'm very happy, I want to eat everything. Or if I'm sad, I want to eat everything as well. So it's like, I think the emotions are higher then...so I think I realize that I want to eat more.

For others, overeating was related to specific negative emotions. One of the most common emotions related to addictive-like eating was anxiety, mentioned by 14 participants. Mariana viewed the anxiety-relieving function of eating as one of the defining features of an addiction: "I think [eating] relieves some anxiety, but you enjoy it, then later comes regret. I think that's what makes it an addiction, right? It's how you feel afterwards." Ellen (43-year-old woman, BMI = 29.41 kg/m^2, YFAS 4 [food addiction criteria not met], no BED) spoke of food's ability to ease tension: "I'm so up and down, I'm so tense, you know? Like...today is for sure a day where I will eat at least two chocolate bars to help ease the tension, right?"

Eating was also used to soothe feelings of sadness, frustration, and anger. Cintia recounted her husband's infidelity and abandonment after the birth of her first child, and said that "food came up to suppress the sadness" afterwards, leading to significant weight gain. For Gabriel (49-year-old man, BMI 31.64 kg/m^2, YFAS 11 [severe], binge episodes but criteria for BED not met), eating provided relief during times of interpersonal conflict: "Sometimes in the middle of the argument, I'm like "well, give me a second, I'm going to eat something", and I come back calmer, with my mind in the right place."

Although participants reported that eating would provide immediate relief from negative emotions, they found that the strategy of eating to regulate emotions was only effective in the short term. Eventually, they would experience negative physical and emotional consequences from overeating:

> You have high points, but the next day you feel like crap. You feel very bad, you wake up all in pain, you feel...guilty. Sometimes when I eat a lot, the next day when I wake up, I feel awful...with a guilty conscience. (Marinalva)

Claudia elaborated on the emotional eating cycle, reflecting that the negative consequences of this pattern outweighed its benefits: “There are moments of small pleasure when you eat. Compared to what comes after, it’s not worth it, but it’s an escape.” The negative emotional consequences of overeating which participants described seemed to make them more likely to overeat again, creating a cycle of negative emotionality, overeating, and short-term relief followed by more negative emotions such as guilt and shame. Following the negative emotions after overeating, Mariana continued, “Then you feel like eating again, you eat again. There is no “period,” there’s no end to it. It’s a cycle, right?” For some participants, particularly the women in our sample, guilt and shame from overeating were compounded by body dissatisfaction, which served to maintain the emotional eating cycle, as Claudia described:

> Every time I looked at the mirror, I couldn’t...I felt like I was looking at a different person. I needed to get away from that, and the only way was to go back to sweets, to food, and it’s a vicious cycle.

Participants related the cycle of emotional eating to analogous cycles in SUDs, where substances and eating both provide relief, and in some cases, euphoric feelings, which are followed by negative emotional and physical consequences:

> It's pretty much like an addiction to alcohol, to drugs. It's just that people don't understand that food does the same thing. Like, you get the same feeling of "I ate now, so everything is alright. No worries, a truck could run me over, anything could happen and it would be alright." That's the feeling I have. (Ana)

3.2.2. Social and situational factors. Participants described social and situational influences on their eating behaviour. For Mariana, the habit her coworkers had of snacking together in the morning encouraged her to overeat:

> I eat breakfast at home. When I get to work, I have breakfast again. Because everyone's eating, right? There's no way you can go in without grabbing a cookie, a coffee, and ... you know? When you think about it, I eat two breakfasts.

For some participants, other situations, such as being at home alone, were associated with overeating: "Even if sometimes I'm not hungry, if I'm home alone, I have to eat something. And when I eat, I can't just eat a little, I end up eating more than necessary." (Andre, 50-year-old man, BMI 38.16 kg/m^2, YFAS 11 [severe], BED).

Some participants had found that they were able to change their eating habits when they were in different environments, for example on vacation:

> I have some tolerance, for example, for people who are bad cooks...but my tolerance is pretty low. So, for example, in a situation like that, I won't be able to, I can't eat that food. So, it's funny that sometimes on vacation at some relatives' houses, those are the times I came back thinner, because the cooking was terrible. (Pedro)

Although changes in the environment were viewed as having the power to change participants' eating habits, this was seen as only a temporary solution:

> If I broke this daily pattern, for example, if I joined the army today and had to serve, or if I participated in a reality show, if I was stuck somewhere where I had no choice, I think I

> would be able to change my habits. But I'm afraid that once I got back to my routine, everything would come back. (Andre)

The power of social and situational factors to modulate eating highlights participants' lack of control, and the degree to which their eating was regulated by external cues, as opposed to internal signals of hunger and satiety.

3.2.3. Ubiquity of food. Whereas many other types of addictions can be managed through abstinence and by limiting exposure to cues in the environment, participants expressed frustration at the fact that food is essential to survival and pervasive throughout the environment.

> You are told to avoid the first drink, avoid the first ... well, the first cigarette. With food, no, it doesn't work like that, there is no way to avoid the first bite. And this is so hard for people who have food addiction. (João)

> An alcoholic goes to AA, goes through treatment, takes medication and, if he stops drinking, he won't die. Like, of course it's not easy, but it's not something that you need to survive. (Bruna, 45-year-old woman, BMI 33.71 kg/m^2, YFAS 9 [severe], no BED)

3.3. Consequences of Addictive-Like Eating

3.3.1. Shame and secrecy. Shame led many participants to hide their eating habits at social gatherings and from family members. Pedro described one strategy that he would use in restaurants to conceal his overeating:

> What I do is eat small amounts...So, people don't really realize the amount that I ate because it was a small amount on the plate, but it's constantly being filled. I keep going back for seconds. And sometimes they'll go: "Everybody finished and you're still eating?" Then that's when I realize that someone noticed and I stop eating.

Marinalva described hiding her overeating from her wife to avoid social conflict:

> I go to the park to eat, or I stay in the stairwell, throw it away, and then go home. Because if she finds out that I ate, she's going to fight with me. She doesn't even know that I eat in secret, I haven't told her...I know it's not right, but I don't want her to fight with me over it.

Mariana ate in secret to conceal her habit from her children, and felt guilty about this secrecy:

> The worst feeling is hiding from your children, you know. Because usually the way we would do it is, like, I would give her one piece and then I'd have two. How bad is that, right? So I felt like there was something wrong, and I started to eat in secret.

3.3.2. Weight gain and body image. All participants described weight gain as a result of addictive-like eating. For Pedro, weight gain was gradual: "I noticed that eventually, over time, of course, with the aging of my body, burning fewer and fewer calories, and I was gaining weight." Guilherme's (69-year-old man, BMI 35.26 kg/m^2, YFAS 11 [criteria for food addiction not met], no BED) stated weight gain was not only noticeable to him, but had also been monitored by his healthcare team:

> I've gained a lot of weight recently, right. I was monitored by an endocrinologist, a cardiologist, and a urologist, right. So, I mean, every time there's one of these appointments, there's always this overweight, right, my weight is going up, I have it on a graph.

As Beatriz (63-year-old woman, BMI 33.12 kg/m^2, YFAS 11 [severe], BED) stated, "You're always fighting with the scale." Some participants, like Leandro (51-year-old man, BMI 38.94 kg/m^2, YFAS 2 [criteria not met for food addiction], no BED), noticed weight gain by its effect on clothing fit: "I find myself hideous wearing a suit at the weight I am. So I feel bad in going-out clothes." As Leandro went on to describe, weight gain was also made apparent by its effects on fitness and physical activity:

> I tried riding my bike at this weight and I was on the right track, but it was really tiring. You end up exhausted. I went for a ride alone one day and I got back home and I couldn't lift my arms, I even joked with my wife, "I'm going to get in the shower and shake my head, because my elbows hurt." So it affects me a lot. I would really like to go back to playing ball with my friends. I used to play ball with them on Wednesdays, it was fun, we'd play and joke and have fun. Today I can't anymore because I'd hurt myself.

Some female participants described how they had come to accept living in heavier bodies. Marinalva recounted her realization that weight need not impact her body image: "Even when I was 60 kilograms I thought I was fat and ugly. Today I'm 103 [kilograms] and I think I'm beautiful. I learned to find myself beautiful." Bruna pinpointed a specific moment when she came to accept her body: "Really, it was like, 'Ah, ok, I guess I'm fat, that's just the way I am!' So that was a moment more of acceptance, so-called acceptance..."

3.3.3. Impact on health. Participants described health consequences such as sleep apnea which had been exacerbated by, or resulted from, overeating:

> I need to lose weight, I'm pretty sure I have problems with cholesterol, high triglycerides and I need to manage my nutrition but it's hard...I have OSA. Do you know what that is? Obstructive sleep apnea, I sleep with that mask thing, the air tube "shshshshshshsh" *[imitates the machine's noise]* so that you don't stop breathing. I wear it when I sleep. If I lose weight, I know there's a chance that wouldn't fix it, but maybe it would help with a lot of my problems. (Franco)

Aware of the seriousness of the health consequences of overeating, participants often specified that they were concerned more with these consequences than with the impact of weight gain on appearance:

> It's not because of aesthetics...I found out I have high cholesterol, which is something that worries me a lot because I never had this problem, like...I always had exams but never had high cholesterol. Then the doc said I had high cholesterol. And I want to get pregnant next year. There are a lot of things, you know? (Marinalva)

3.3.4. Social consequences. Participants described feeling judged by others for their weight and eating habits, often from an early age:

> There was a party like they would say: "Oh, look! There she goes eating again. Oh, you'd better hurry up and eat, otherwise she'll eat it all." And then I got this feeling, like...that people would be talking about me, judging me, understand? (Marinalva)

In Brazil, obesity is thought of as an issue that primarily affects the lower classes. Cintia came from a family of high socioeconomic status where this stereotype added another layer to the weight-based judgments of her family members:

> My family, everybody goes, "Wow, you've gained a lot of weight. How awful." Because they do say this... "Wow, you're so fat. Only poor people get that fat. Why are you like this? Middle class people don't gain weight." You know? It's horrible. You already feel bad about yourself, right? And then a bunch of people go and say those things. You don't need to hear it because you already know. Every day you look at the mirror, you know it. So it's always a slap in the face, right? (Cintia)

Feeling judged by relatives and friends led some participants to withdraw from social situations:

> Once, at my aunt's house, she ended up taking the plate away. She said: "Stop eating. Why are you eating so much? I can't stand to see you eating that much." And I couldn't stop, I kept having more. And then I stopped having a social life, even with family. I was growing apart from them. Like if there was any type of celebration in the family I wouldn't go 'cause I would say, "No, I'm gonna eat too much, they'll be watching, and

> they'll judge me and everything." And with friends too, I stopped going out because...uh, I got completely isolated. (Claudia)

However, not all participants let their weight impact their social lives. Leandro, for example, who had expressed that he found himself hideous in a suit, clarified that this did not stop him from going out:

> I go and I don't let it bug me. But I had a bunch of events at the end of the year, my niece's graduation and two weddings. I think I look awful in suits because of my size, but I don't stop myself from going out because of it.

3.3.5. Professional limitations. An important consequence of addictive-like eating that eight participants brought up were work-related limitations. In a few cases, these limitations were a direct consequence of addictive-like eating, rather than weight. For example, Claudia described a reliance on food to regulate her mood, and irritability at work when she was unable to eat:

> It got to the point where I had to eat something, if I didn't eat, I would get the shakes and would become aggressive with my coworkers. Like, I'm a journalist, I worked at a newspaper for a long time, you barely have time to breathe...like, on some days I didn't have the time to sit down and eat, even if there was food available, I didn't have time to sit and eat. So I would get very aggressive with my colleagues because I wasn't able to eat. My boss even once said to me, "Stop it, go have your chocolate because you're unbearable." And then I would go eat it, and come back calm.

Four participants described perceived professional limitations as a consequence of weight. Some professional limitations were self-imposed due to internalized weight stereotypes and the expectation of judgment from others:

> I took a professional course in hairdressing. I was already heavy at that time, I had gained a lot of weight. So it wasn't nice for me. Why? Because even if I was very capable, you know, wonderful at what I did, people would look at me and say "Wow, a fat hairdresser!?" It was no good. "Whoa, someone who takes care of other people's bodies, takes care of other people but neglects their self..." So, for me it was really embarrassing. I only worked in that area for a short time. (Cintia)

Other participants, like Pedro, were not able to pinpoint instances in which weight had directly impacted their careers, but expressed a suspicion that their weight had likely engendered negative judgment from superiors and been a barrier to their professional advancement:

> People have prejudices about fat people, right? So I know that it had an impact, I can't say what it was because I didn't know how people were judging or assessing me. But there was for sure [an impact on my career], because there were people who would even complain about what someone else was wearing. And I know my weight would have bugged them.

Of the four participants who described weight-related professional limitations, three were women.

4. Discussion

This study examined conceptualizations of addictive-like eating among Brazilian women and men seeking treatment for food addiction. Our aim was to understand how participants defined and experienced addictive-like eating, to help move toward a definition of this construct that captures its diverse clinical manifestations and facilitates valid assessment. Our thematic analysis identified participants' conceptualizations of the (1) characteristics, (2) causal factors, and (3) consequences of addictive-like eating. Below we interpret findings presented in the

results section, describing their significance for the conceptualization, assessment, and treatment of addictive-like eating in light of previous research.

4.1 Characteristics of Addictive-Like Eating

Most of the characteristic features of addictive-like eating which we identified have been described in previous research. Lack of control has emerged as a central feature of addictive-like eating in other qualitative interview studies (Cullen et al., 2017; Hetherington & Macdiarmid, 1993), as well as in open-ended survey-based research (Ruddock et al., 2015) and quantitative studies (e.g., Meadows, Nolan, and Higgs (2017) conducted regression analyses and identified perceived lack of self-control as the most important distinguishing factor between those who did and did not consider themselves addicted to food). Similarly, previous qualitative and quantitative research have also identified emotional eating (Burmeister, Hinman, Koball, Hoffmann, & Carels, 2013; Clark & Saules, 2013; Cullen et al., 2017; Curtis & Davis, 2014; Davis et al., 2011; Ruddock et al., 2015; Van Ostrand, 2015) and preoccupation with food and eating (Ruddock et al., 2015; Van Ostrand, 2015) as features of addictive-like eating. Our findings are also consistent with previous studies that have demonstrated a large role of environmental factors in substance use disorders (McGue, Elkins, & Iacono, 2000), gambling (Marshall, 2005), and overeating (Campbell et al., 2007).

Three of our identified themes were not described in previous qualitative studies conducted with non-clinical populations, but appeared consistent with the results of Van Ostrand (2015), who interviewed participants in the Food Addicts in Recovery Anonymous program (a 12-step self-help program). First, repeated unsuccessful attempts to reduce eating or lose weight were similarly identified by Van Ostrand (2015), who described a theme of “failed diets and other weight loss methods.” Second, Van Ostrand (2015) similarly discussed participants’ attribution that external factors played an important role in governing food intake. Third, Van

Ostrand (2015) described forms of distress and impairment among her participants which were similar to the types we encountered. The experiences of distress, impairment, repeated attempts to reduce eating, and a high impact of external factors may characterize individuals with more severe addictive-like eating such as our participants and Van Ostrand's (2015), but may be less common among the non-clinical participants who have comprised the samples of other qualitative studies (Cullen et al., 2017; Malika et al., 2015; Ruddock et al., 2015). These findings are consistent with bivariate relationships which have emerged from quantitative studie: self-reported food addiction has been associated with weight cycling (Gearhardt, Boswell, & White, 2014), eating in response to external cues (Davis et al., 2011; Mason et al., 2017), and indicators of distress such as depression and anxiety (r = .35 - .79; Burmeister et al., 2013; Eichen, Lent, Goldbacher, & Foster, 2013; Gearhardt, White, et al., 2012; Ivezaj, White, & Grilo, 2016; Raymond & Lovell, 2016). In light of past qualitative and quantitative results, the unique features of our participants' experiences with addictive-like eating are likely driven by the severity of their concerns, rather than by cross-cultural differences.

4.2 Implications and Future Directions

4.2.1. Conceptualization. Our findings highlighted clinical features that characterize the experiences of this sample of individuals seeking treatment for addictive-like eating in Brazil. These features merit further examination through larger-scale quantitative research, with the aim of improving definitions and assessment of addictive-like eating. It remains unclear to what degree cultural differences shape presentations of addictive-like eating. This question is an important one for future research to explore, perhaps by directly comparing equivalent samples of people with addictive-like eating across different nations and cultures.

Our findings do not necessarily shed light on whether addictive-like eating should be conceptualized as a substance use disorder, behavioural addiction, subtype of BED, or along a

transdiagnostic continuum. The clinical features which we identified, including eating to regulate emotions, are nonspecific: they characterize not only addictive-like eating and SUDs, but also gambling, eating disorders, and many other mental illnesses. Participants in the present study drew many parallels between addictive-like eating and substance misuse, suggesting that individuals with this pattern may strongly identify with the substance-based food addiction hypothesis. However, the tendency to draw these parallels is not sufficient to support any single conceptualization of addictive-like eating over another, and may instead reflect popularity of the substance-based food hypothesis in popular media (Friedman, 2017; Ross, 2012; Tarman, 2014) and, for those who had taken part in treatment, among group facilitators and other participants.

We also observed similarities between BED and addictive-like eating, most importantly a lack of control over eating, a characteristic that is central to both problems. However, only six (40.0%) of our participants screened positive for BED, consistent with qualitative (Curtis & Davis, 2014) and quantitative studies (Cassin & von Ranson, 2007) suggesting incomplete overlap between addictive-like eating and BED. These findings would discourage conceptualizing addictive-like eating as a subtype of BED, as previously hypothesized (Davis, 2013). Additional research is needed to further elucidate parallels between addictive-like eating, substance use disorders, and other addictive behaviours, and to delineate this pattern from other recognized forms of eating pathology.

Another important question for the conceptualization of addictive-like eating is whether the distress and impairment associated with this pattern result from the eating pattern itself, or rather from associated weight gain combined with internalization of the thin ideal. Because all participants in the present study reported having experienced weight gain as well as addictive-like eating, it is difficult to disentangle possible sources of distress and impairment. As specified in the DSM-5, in order for a syndrome to be conceptualized as psychopathology, the distress or

impairment associated with it must be due to a dysfunction within the individual, rather than cultural/social context and values (American Psychiatric Association, 2013, pp. 14-15). Thus, if health consequences, psychological distress, and impairments in functioning were completely accounted for by weight gain and body dissatisfaction, perhaps addictive-like eating should not be conceptualized as a form of psychopathology. Disentangling sources of distress and impairment in addictive-like eating is an important task for future research. Additional qualitative research may help further understand whether individuals would be distressed by lack of control over their eating if their bodies conformed to society's thin ideal. Quantitative studies may examine the amount of variability in distress and impairment accounted for by the eating pattern itself, versus by weight gain, body dissatisfaction, and internalized weight stigma.

4.2.2 Assessment. Some features of addictive-like eating which our participants described were captured well by existing measures designed to assess this construct. Lack of control is assessed directly by separate subscales of the Addiction-Like Eating Behaviour Scale (AEBS; Ruddock et al., 2017) and by the 13-item Reward-based Eating Drive Scale (RED-13; Mason et al., 2017). DSM criteria for SUD operationalize lack of control: Criterion 1 specifies that "the substance is often take in larger amounts or over a longer period than was intended" (American Psychiatric Association, 2013). The YFAS, which corresponds to these DSM criteria, assesses lack of control with a similarly-worded item (Gearhardt et al., 2009, 2016). Preoccupation with food is included as a subscale within the RED-13 questionnaire (Mason et al., 2017), and is indirectly assessed by questions in the YFAS 2.0 which target cravings and use in physically hazardous situations (e.g., Item 29, "I had such strong urges to eat certain foods that I couldn't think of anything else," and Item 34, "I was so distracted by thinking about food that I could have been hurt"; Gearhardt et al., 2016), but does not appear to be assessed by the AEBS (Ruddock et al., 2017). Repeated unsuccessful attempts to reduce or cut down use are a

diagnostic feature of SUDs, this characteristic is assessed by the YFAS (questions 4, 25, 31, 32), but not by other measures of addictive-like eating such as the RED-13 (Mason et al., 2017) or AEBS (Ruddock et al., 2017).

Other features which our participants described appear to be indirectly or incompletely assessed by measures of addictive-like eating. As using substances to regulate emotions is not a diagnostic feature of SUDs, in parallel, the YFAS does not directly assess emotional eating. However, items on the YFAS related to tolerance and withdrawal may indirectly touch on emotional eating (e.g., Item 26, "I needed to eat more and more to get the feelings I wanted from eating. This included reducing negative emotions like sadness or increasing pleasure." and Item 13, "If I had emotional problems because I hadn't eaten certain foods, I would eat those foods to feel better."; Gearhardt et al., 2016). Neither the RED-13 (Mason et al., 2017) nor the AEBS includes items to assess emotional eating (Ruddock et al., 2017). Responsiveness to the food environment is also not directly assessed by the AEBS (Ruddock et al., 2017) or the RED-13, however, two items on the RED-13 appear to be related to this construct (Item 1, "I feel out of control in the presence of delicious food," and Item 3, "It is difficult for me to leave food on my plate"; Mason et al., 2017). Similarly, the YFAS does not directly assess responsiveness to the food environment, but some items may indirectly assess this construct (e.g., Item 10, "I avoided work, school, or social activities because I was afraid I would overeat there"; Gearhardt et al., 2016). Finally, the criteria of distress and impairment appear inadequately captured by existing measures of addictive-like eating: the YFAS includes just one item each to assess distress ("My behavior with respect to food and eating causes significant distress") and impairment ("I experience significant problems in my ability to function effectively because of food and eating"), whereas neither the AEBS (Ruddock et al., 2017) or RED-13 (Mason et al., 2017) assesses these features.

No single questionnaire appears to comprehensively capture all the features of addictive-like eating which our participants described. Further, the finding that only two-thirds of our participants met YFAS criteria for food addiction suggests that this measure may inadequately capture our participants' experiences. Additional research with larger samples of treatment-seeking individuals, as well as cross-cultural studies, may help determine whether further scale development and refinement is needed. Before applying measures such as the YFAS in non-Anglo-Saxon cultures or using them for diagnostic and screening purposes in clinical settings, it is critical to gauge the validity of these measures among these populations, and for these purposes. In light of the potential limitations of current measures of addictive-like eating, we recommend that clinicians and researchers consider administering multiple measures to assess comprehensively the possible symptoms and associated features of this pattern, particularly when assessing addictive-like eating among treatment-seeking individuals, or people outside of the Anglo-Saxon world. Assessment batteries for addictive-like eating may include measures of emotional eating, such as the Emotional Eating Scale (Arnow, Kenardy, & Agras, 1995), the Emotional Overeating Questionnaire (Masheb & Grilo, 2006), or the Dutch Eating Behavior Questionnaire (van Strien, Frijters, Bergers, & Defares, 1986); measures of responsiveness to the food environment, such as the Power of Food Scale (Cappelleri et al., 2009); measures of weight-related distress, such as the Weight- and Body-Related Shame and Guilt Scale (Conradt et al., 2007), the Weight Self-Stigma Questionnaire (Lillis, Luoma, Levin, & Hayes, 2010) and the Weight Bias Internalization Scale (Durso & Latner, 2008); and, perhaps most importantly, measures of impairment such as the Clinical Impairment Assessment Questionnaire (Bohn & Fairburn, 2008). Administering complementary assessment measures to assess these features may allow future research to examine their relevance to addictive-like eating. If these features are common and they hold clinical utility, for example by differentiating individuals with more

severe addictive-like eating or predicting treatment outcomes, they may merit consideration for inclusion in definitions of addictive-like eating and could inform further scale development and refinement.

4.2.3 Intervention. Although it would be inappropriate to generalize the results of our qualitative study or imply that all experiences of addictive-like eating mirror those of the small and highly specific group of individuals whom we interviewed, our results do have two implications for efforts to assist individuals with addictive-like eating. First, our results, together with previous research, suggest that patterns of addictive-like eating are associated with clinically significant distress and impairment in areas such as interpersonal and occupational functioning, emotional consequences, and health status. Accordingly, these forms of distress and impairment merit assessment when individuals with addictive-like eating present to treatment. Future research may empirically examine the efficacy of targeting these areas of concern in treatment. Second, our results suggest that situational and external factors may also play an important role. Thus, leveraging characteristics of the food environment, either through individual interventions or on a larger scale, may help promote healthier eating patterns among individuals similar to our participants. People with addictive-like eating may find it helpful to limit their access to certain foods, as is the abstinence-based approach followed in 12-step self-help programs such as Food Addicts in Recovery Anonymous (Van Ostrand, 2015) and Overeaters Anonymous (OA; Russell-Mayhew, von Ranson, & Masson, 2010; von Ranson & Farstad, 2014). However, the ubiquity of food in the environment and the necessity of eating for survival makes it difficult to maintain abstinence , leading to failed attempts at restriction such as those described by our participants. The power of the food environment raises the question of whether public policy could play a role in tackling this issue, for example by introducing taxation to restrict the availability or affordability of unhealthy food options (Gearhardt, Bragg, et al.,

2012). In a study which examined the impact of food addiction on perceptions of public policies to reduce overeating, participants expressed some support for such policies, but were skeptical about whether such policies would be effective (Cullen et al., 2017). Indeed, there is no consensus on whether such policies have the intended impact on food consumption and rates of obesity (Finkelstein, Strombotne, Zhen, & Epstein, 2014; Sisnowski, Street, & Merlin, 2017).

4.4 Limitations

Although our findings provided important insights into addictive-like eating in a sample of treatment-seeking individuals in Brazil, the present study is not without limitations. Our small sample was unique in several ways that preclude us from making inferences as to why certain themes emerged. First, participants were all Brazilians, treatment-seeking, and had obesity. Thus, we cannot ascertain whether the novel features of their descriptions reflect cross-cultural differences, are driven by severity of addictive-like eating, or are consequences of obesity rather than addictive-like eating. Second, of 15 participants, 6 had received treatment for their addictive-like eating, including psychoeducation which could have shaped their understanding and descriptions of addictive-like eating. This limitation was mitigated by the fact that only a minority of participants had taken part in treatment at the time of their participation, but nonetheless, our findings should be interpreted with caution. Third, our sample was likely not representative of the greater Brazilian population, with high education and income levels, and a large proportion of individuals identifying as white and unemployed. In sum, the present qualitative study described the views and experiences of a small and highly specific group of individuals. We intended to characterize the experiences of our sample and contextualize these findings within the literature. It would be inappropriate to propose an all-encompassing definition of addictive-like eating that applied to the wide range of individuals who experience

this pattern, or even specifically to individuals in Brazil, as doing so would disregard the limitations of our study, and of qualitative research more generally.

4.5 Conclusions

Overall, the experiences of our sample of Brazilian women and men seeking treatment for addictive-like eating seemed similar to those previously described in Anglo-Saxon countries. These descriptions centered on lack of control, preoccupation, attempts to reduce eating and weight, emotional eating, situational factors, and a wide array of negative consequences. six sessions focused on nutrition and psychoeducation; three sessions employed motivational interviewing to increase readiness for change; and 12 sessions employed schema therapy, an approach which emphasizes clients' emotional experience, therapeutic relationship, and life experiences, integrating elements of cognitive-behavioural therapy with other techniques. Overall, the definitions and experiences of individuals in our study did not appear to be fully captured by any recognized disorder or existing questionnaire. Thus, it will be important to continue to examine how well existing measures of addictive-like eating capture this construct. Meanwhile, clinicians and researchers interested in assessing addictive-like eating in treatment-seeking populations and/or individuals outside the Anglo-Saxon world may wish to consider administering multiple measures to assess the full spectrum of important features that may be associated with this pattern.

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