

A mixed methods analysis of maternal response to children's consumption of a palatable food: differences by child weight status

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Introduction

The pervasive availability of energy-dense palatable foods is believed to contribute to the childhood obesity epidemic (1). As childhood obesity has become a major public health crisis over the last several decades (2), children's consumption of fast food (1), sugar-sweetened beverages (3) and other 'junk foods' (1) has increased. While national guidelines (4) recommend that parents restrict or limit their children's access to such foods, little is known about the approaches parents use to limit their children's intake of unhealthy food. Further, much remains to be learned about which of these approaches may be optimal to prevent children from developing obesity (5).

To date, maternal feeding practices, such as restriction of child intake, have mainly been studied using

Summary

Background: Little is known about how mothers respond to their child eating palatable foods.

Objectives: The objectives of the study are to examine maternal behaviours when children are presented with a large portion of energy-dense palatable food in an experimental setting and to examine differences by child weight status.

Methods: Mother-child dyads ($N = 37$) (mean child age 70.8 months) participated in a videotaped eating protocol with cupcakes. Anthropometrics were measured. Videos were analysed using discourse analysis and were reliably coded for the presence or absence of the most salient theme. Analysis of variance examined theme presence by child and mother weight status.

Results: Mothers disavowed responsibility for their child's eating. Mothers were observed to roll their eyes at the child, throw their hands up in exasperation and distance themselves both physically and emotionally when the child ate the cupcakes voraciously or with high enjoyment. Mothers of children with obesity (vs recommended weight) engaged in more counts of disavowal ($p = 0.01$).

Conclusions: Mothers of children with obesity distanced themselves from their child, seeming to disavow responsibility for the child's eating of 'junk food'. Mothers may respond to their child's seemingly gluttonous eating by disavowing responsibility due to the stigma of being a parent of a child with obesity.

Keywords: mother-child relations, eating, paediatric obesity.

self-report questionnaires (5–7) or coding of simple feeding behaviours (8) (e.g. the mother denying the child's request for more food, moving the plate away from the child, appealing to health considerations or critiquing the manner in which the child is eating) both at home (8) and in laboratory settings (9). Prior studies of restriction have found mixed associations with markers of child adiposity (5). One reason for these inconsistencies may be that these methodologies capture the mothers' behaviours either by self-report, which is vulnerable to bias, or by relatively simple observational measures of behaviour in isolation from the child, which are less well suited to capture subtler behaviours, facial expressions and verbal exchanges that occur in the course of parent-child interaction.

The objectives of this study were to identify, using a qualitative discourse analysis approach based on

high-quality video clips, interactional patterns between mothers and their children when the dyad is offered excessively large portions of dessert and to examine differences in maternal–child interaction by child and mother weight status. Discourse analysis allows for the study of the complex nature of how a child and mother interact around eating, focusing on what is said, how it is said and the gestures and facial expressions that accompany the verbal exchanges. A better understanding of how mother–child dyads eat and talk together in this context may shed new light on our understanding of mothers’ management of the feeding interaction in an obesogenic environment, and perhaps provide novel targets for intervention.

Methods

Overall procedure

The current report describes detailed mixed method analysis of mother–child interaction in a feeding context. Participants ($N = 37$ dyads, refer to the Study Participants section for selection criteria) (mean child age = 70.8 months, range 56.9–91.4 months) were drawn from a larger longitudinal study, which used a multimethod approach to characterize maternal feeding behaviour among low-income children in Michigan and has been previously described (9). Participants in the original longitudinal study were invited through their child’s Head Start program (a free, federally subsidized preschool program for low-income children) to participate in a study about children’s eating behaviours. As all child participants were recruited from Head Start, they were aged 3 to 4 years and living in low-income families at the time of recruitment into the original study. Participants were followed longitudinally, and about 2 years later invited to participate in this current study.

Eligible mothers were fluent in English, had less than a 4-year college degree and had no food allergies. Eligible children had a gestational age greater than 35 weeks and no significant neonatal complications, serious medical problems, food allergies or involvement in foster care. Demographic information was reported by questionnaire, and heights and weights of mothers and children were measured according to standardized procedures (10). Mothers also completed the Center for Epidemiology Studies Depression Scale (11). Children’s body mass index percentiles were calculated based on US Center for Disease Control and Prevention growth charts.

Each dyad participated in a videotaped laboratory interaction. This protocol, which has been published in full elsewhere (12), assesses mother–child interaction and responses in relation to different foods in a

controlled environment. The laboratory environment reduces the variability introduced by the home setting (e.g. sibling interference, distraction by the television, multiple family members present, etc.). In brief, the child and mother were asked to fast for 2 h prior to the visit. They were seated at a table alone in a quiet room, and were presented with individual portions of four different types of foods, sequentially in a randomized order by a research assistant. The foods differed in familiarity (familiar or unfamiliar) and sweetness (dessert or vegetable). The four foods were green beans (familiar vegetable), chocolate cupcakes (familiar dessert), artichokes (unfamiliar vegetable) and halva (unfamiliar dessert). Upon presenting each food, the research assistant invited the dyad to “Give it a try if you’d like”. For this analysis, only the segment during which the mother and child were presented with chocolate cupcakes (two Hostess chocolate cupcakes, 104.96 ± 0.5 g per participant) was analysed. The decision was made to focus on the segment with chocolate cupcakes as prior work (9) has shown that this palatable energy-dense food elicited more restrictive feeding behaviours from mothers than the other foods offered.

The entire procedure was videotaped for later analysis. The University of Michigan Institutional Review Board approved the study protocol. Mothers provided written informed consent, and children provided verbal assent. Each family was compensated \$60.

Study participants

The goal was to purposefully select 40 mother–child dyads from the longitudinal cohort, for inclusion in comparison groups of 10 dyads each based on the four possible combinations of mother and child weight statuses: child with recommended weight status (defined as $BMI \geq 5 - < 85\%$ ile for age and sex) versus with obese weight status (defined as $BMI \geq 95\%$ ile for age and sex) crossed with mother with recommended weight status (defined as $BMI 18.5 - < 25$) versus mother with obese weight status (defined as $BMI \geq 30$). Purposeful sampling with maximum variation with regard to the combination of mother and child weight status was used. A total of 37 mother–child dyads were included, with 10 dyads in each comparison group (mother with obesity–child with obesity, mother with obesity–child with recommended weight, mother with recommended weight–child with obesity and mother with recommended weight–child with recommended weight), except for mother recommended weight–child with obesity, as there were only 7 dyads meeting this criterion in the longitudinal cohort sample.

Discourse analysis of video-recorded laboratory eating interaction

The videotaped segment for each of the 37 dyads was analysed using a set of qualitative research methods known broadly as discourse analysis (13). The theoretical framework used, a form of sociolinguistic discourse analysis, aims to examine language in its social context of use, and focuses on how speakers use language to accomplish social functions (14). By drawing on a large set of linguistic and non-linguistic resources, participants in conversation can index, or communicate, their 'take' or stance on a person, an idea or something that is happening within the context (15). The positions participants take towards each other and ideas are not static, however, but mutually negotiated, evolving over the course of an interaction, and informed in complex ways by larger social factors (14).

Discourse analytic research methods were applied to the video recordings of mother-child dyads. Video segments were viewed multiple times to identify salient themes. Research assistants transcribed segments using *Atlas.ti* software (version 7.5.0) according to standard discourse analytic methods (16). Transcriptions captured the linguistic and paralinguistic behaviours of both participants showing not just who was talking and what they said but also significant paralinguistic, or non-verbal information such as laughter, prosodic patterns (vocal inflections, rising/falling intonation), gaze (where participants looked, and when), body shifts (towards/away from each other), exaggerated facial expressions (grimaces, frowns, eyebrow raises) and gestures. Transcripts were video-linked in *Atlas.ti* such that any moment in the transcript could be called up on the corresponding video segment. Video-linked transcripts were interrogated for recurrent patterns of interaction.

Themes were identified and refined through a series of group meetings with study team members. Study team members discussed and refined the themes to reflect the most coherent, salient and saturated final themes. Four themes in mother-child interaction patterns were identified, three of which (the mother directly limits or restricts her child's intake, the mother appeals to health considerations and the mother critiques her child's manner of eating) have been previously described in the literature in detail (6,17,18) (refer to Supplementary information for further descriptions of these themes and illustrative quotes). One of the four themes, maternal disavowal of responsibility for the child's eating, was deemed to be unique; therefore, this theme was chosen to be

studied in greater detail. A disavowing behaviour was classified as one in which the mother appeared to be physically, emotionally or verbally distancing herself from the child. These behaviours may indicate a mother's overall disapproval of the child's eating behaviours, and possibly her desire to separate herself, or disavow herself of responsibility, almost as if to say "This is not my fault, I'm a good mother". These behaviours may also convey a sense of shame, exasperation, dismissal or disgust. Examples included laughing, shifting her gaze away from the child and towards the camera or the door, shifting her body away from her child and making facial expressions such as eyebrow raises and eye rolling. The coding scheme, which counted episodes of disavowal of the child's eating behaviour, is provided in Table 1. Videos were independently coded by two coders trained to reliability (ICC >0.80), after which the remainder of the videos were coded by a single coder for counts of the theme.

Statistical analysis

Statistical analyses were conducted using SAS 9.4 (SAS Institute Inc., Cary, NC). General linear models for continuous measures and logistic regression for binary measures were used for comparing participants' characteristics by weight status. Poisson regression was used to examine the association of maternal and child weight status as well as their interaction with counts of the theme. A binary variable for maternal disavowal was also created, termed 'ever disavow' if counts of disavowal were ≥ 1 , as opposed to 'never disavow' if counts of disavowal = 0. Logistic regression was used to examine the association of maternal and child weight status with the ever disavow outcome. We performed bivariate analysis of maternal and child characteristics with the predictors (maternal and child weight status) and outcome (counts of the theme); no characteristics were associated with both the predictor and outcome, and multivariate analysis was therefore not pursued. Correlations were examined between counts of disavowal and maternal and child characteristics. An alpha level of $p < .05$ was set a priori for statistical significance.

Results

Many mothers ($n = 15$, 40.5%) were noted to disavow responsibility for their child's intake; in doing so, they distanced themselves both physically and emotionally from the child. Often, when the child exhibited excessive or prolonged enjoyment of the cupcakes, mothers used language, gestures and facial

Table 1 Coding scheme capturing counts of maternal disavowal of responsibility for child's eating behaviours

A disavowing behaviour can be classified as one in which the mother appears to be physically or emotionally or verbally distancing herself from the child. These behaviours may indicate her overall disapproval of the child's eating behaviours, and possibly her desire to separate herself, or disavow herself of responsibility, almost as if to say, "This is not my fault, I'm a good mother". These behaviours may also convey a sense of shame, exasperation, dismissal or disgust. The mother's affect may be neutral or negative.

Specific behaviours of shame include averting or lowering her head or eyes, blushing or laughing uncomfortably. Specific behaviours of exasperation include eye rolling, sighing or throwing her hands up in the air. Specific behaviours of dismissal include moving her body away from the child (shifting away or turning away), laughing at the child and looking towards the camera or towards the door. Specific behaviours of disgust include facial expressions, lower lip lowered and moving the head forward and down (19,20).

In addition, behaviours include comments to the child or to the research assistant criticizing the child's eating behaviour or demonstrating mother's shame, disapproval, disgust or exasperation. For example: "I can't believe she ate that, it's really terrible that she ate that", "I'm so embarrassed you chowed that whole thing down", "Who taught you to eat like that?", "Stop it, that's gross." These behaviours and comments may convey a sense of shame about the child's eating behaviours or that the mother feels that she does not want to be associated with the child's eating behaviours. These statements and behaviours may also include a sense of overall disapproval of the child's eating behaviours and affinity towards the cupcake.

expressions that communicated a disavowal of their child's eating behaviours.

These behaviours are illustrated in excerpts presented in Table 2. In the first example (Table 2, example 1), the mother demonstrates her disapproval and disavowal of her child's eating by raising her eyebrows and physically moving away from the child. In the second example (Table 2, example 2), the mother comments directly to the video camera about her child's 'horrible' preference for the cupcakes. In a final example (Table 2, example 3), the mother exerts control over her child's eating by verbally and physically restricting her child's intake, while also distancing herself from the eating behaviours of which she disapproves.

Participant characteristics of the sample, and results of bivariate analyses of participant characteristics by mother with obese weight status (vs without) and child with obese weight status (vs without), are shown in Table 3. Participant characteristics by mother and child weight status group are also shown in Table 3. There were no statistically significant differences in participant characteristics between groups, with the exception of child age.

As a whole, mothers engaged in $M = 1.20$ (SD 2.20, range 0–9) counts of disavowal of responsibility for the child's eating. Child weight status was significantly associated with counts of disavowal ($M = 2.35$ (SD ± 2.83 , range 0–9) among children with obesity, versus $M = 0.30$ (SD ± 0.57 , range 0–2) counts among children with recommended weight,

(RR = 7.56, 95% CI 3.18–17.73)). Mother weight status was not associated with counts of disavowal ($M = 1.60$ (SD ± 2.54 , range 0–9) among mothers with obesity, versus $M = 0.82$ (SD ± 1.67 , range 0–5) counts of disavowal among mothers with recommended weight ($p = .29$)). The interaction between mother and child weight status with counts of disavowal was not significant. Of the mothers, 15 (40.5%) ever disavowed responsibility for their child's eating. Mothers of children with obesity compared with mothers of children with recommended weight were significantly more likely to ever disavow (vs never) (66.6 vs 33.3%, $p = .037$). Mothers with obesity, compared with mothers with recommended weight, showed no difference in their likelihood to ever disavow (50.0 vs 29.4%, $p = .20$). The interaction between mother and child weight status in predicting ever disavowing was not significant. As shown in Table 4 (Supplementary Files), participant characteristics were not correlated with counts of disavowal.

Discussion

This study examined mothers' responses to their child being presented with an excessively large portion of an energy-dense palatable food and identified a theme in mothers' behaviour that we do not believe has been previously described in the research literature, but may have important implications for clinical interactions and interventions. Specifically, when their child was obviously enjoying eating the cupcake,

Table 2 Illustrative examples from three separate dyads of mother–child interactions in which the mother disavows responsibility for child's food intake**Example 1**

(Child takes a bite of the cupcake, turns and smiles at her mother)

Mother: *"That's your favorite food, huh?"* (Said as she raises her eyebrows skeptically, shifts her head back, slowly shaking her head 'no', then looks back down at the child).

Child: *"Going to actually eat it up."* (Said as the child happily picks up the cupcake and takes a bite, smiling contentedly. Mother looks directly and disapprovingly at the child as she chews.)

Child: *"Yummm!"* (Child looks up at mother and smiles, meeting her mother's gaze. Mother again shakes her head 'no' with a stern expression, then looks away from the child and down).

Mother: *"So she brought you something you like. Is it because Mommy don't buy you that at home?"* (Said in a flat monotone voice as she looks back at the child with irritation in her voice). *"Who buys you that? Your dad!"* (Mother shakes her head again in seeming disbelief, sighs with exasperation and looks up towards the camera. Child continues to eat, turns her body away from the mother and gets closer to her cupcake. Child then turns towards her mother with a questioning look and smile).

Mother: *"I'm not saying nothing."* (Said in a sarcastic, disapproving and defensive tone. Mother raises eyebrows and leans away from child, briefly looks up, then back at the child who continues to eat happily).

Child: *"Why are you looking at me?"* (Mother laughs with exasperation and child whines with mild embarrassment).

Example 2

Mother: *"Oh look at that, oh geez."* (Laughs and widens eyes as the research assistant places the cupcakes in front of the participants).

Mother: *"See, see what's wrong? With the junk stuff?"* (Mother gestures at child who is starting to eat happily and voraciously, speaking to the camera).

Mother: *"That's horrible."* (Again, gesturing to the child, laughing awkwardly and rolling her eyes.)

Mother: *"That's bad."* (Mother laughs uncomfortably, looking directly at her daughter then shifting her gaze away).

Child: *"Cupcakes are yummy!"* (Said with a big smile, as the child holds a cupcake with both hands and takes a big bite. ..). (When the research assistant returns at the end of the protocol)

Mother: *"I got full off of one. That's bad. We go for the junk food."* (Said while covering her face slightly, with embarrassed tone to her voice). *"She ate it too fast."* (Shifting gaze away from child).

Child: *"No I didn't!"* (Said in protest, leaning in closely to mother with slight frown.)

The next excerpt is a striking example of a mother disavowing responsibility for her child's eating behaviours using her facial expressions and gestures while simultaneously trying to get her child to stop eating.

(Child is intently eating the cupcakes, making crumbs and appearing content)

Mother: *"You don't need it, [child's name]. Now stop"*. (Child ignores his mother and continues eating the second cupcake. Mother sighs and rolls her eyes with a helpless expression. Mother looks back at her child eating and shakes her head in seeming disbelief).

Mother: *"[Child's name]!"* (Mother raises her eyebrows, shrugs her shoulders and shakes her head in a "whatever" manner, shifting her body away from the child).

Mother: *"Now stop. Stop it. Don't eat like that."* (As the child continues to ignore her and continue to eat, the mother frowns and shakes her head, looking down and away from her child. The mother then looks back and shakes her head with eyebrows raised in disapproval).

Example 3

(As the mother and child are both beginning to eat)

Mother: *"Please don't pig out."* (Mother pushes her own plate away from herself). *"You don't need to eat both of these!"* (Glances at daughter's plate of cupcakes.)

Child: *"Can I save one?"* (Child looks up pleadingly towards her mother.)

Mother: *"No."* (Said firmly. Mother shakes her head, looks away from her daughter, then back towards the child who continues to eat. Mother then pivots her body away from the child.)

(continues)

Table 2 (Continued)**Example 3**

(Child takes a big bite of her cupcake, finishing the first cupcake)

Mother: “*There you go, you are good.*” (Said in a monotone but slightly pointed manner. Mother then reaches and moves the child’s plate with the other cupcake away from her, out of reach. Again she shifts her body and gaze away from the child)

Child: “*But I want the last one. . .*” (Said in whining voice, eyes gazing towards the cupcake, mouth pouting with a sad facial expression.)

Mother: “*Uh uh.*” (Said shaking her head ‘no’, and looking up and away from her child who continues to stare at the cupcake.)

Table 3 Participant characteristics and bivariate comparisons by weight status ($N = 37$)

	Entire sample Mean (\pm SD) or n (%)	Mother weight status*			Child weight status [†]		
		Mother with obese weight status ($n = 20$)	Mother with recommended weight status ($n = 17$)	p value	Child with obese weight status ($n = 17$)	Child with recommended weight status ($n = 20$)	p value [‡]
		Mean (\pm SD) or n (%)	Mean (\pm SD) or n (%)		Mean (\pm SD) or n (%)	Mean (\pm SD) or n (%)	
Child characteristics							
Age (months)	71.8 (8.3)	75.0 (7.9)	68.0 (7.2)	.002	70.3 (7.3)	73.1 (9.0)	.15
Child is male	19 (51.4)	8 (40.0)	11 (64.7)	.16	6 (35.3)	13 (65.0)	.09
Mother characteristics							
Age (years)	30.2 (4.8)	30.02 (3.5)	30.3 (6.2)	.84	30.3 (4.9)	30.05 (4.9)	.87
White non-Hispanic	26 (70.3)	13 (65.0)	13 (76.5)	.48	11 (64.7)	15 (75.00)	.54
Other	11 (29.7)	7 (35.0)	4 (23.5)		6 (35.3)	5 (25.00)	
Highest level of education							
≤HS diploma	17 (46.0)	10 (50.0)	7 (41.2)	.60	8 (47.1)	9 (45.0)	.94
>HS diploma	20 (54.0)	10 (50.0)	10 (58.8)		9 (52.9)	11 (55.0)	
Single parent household	18 (48.7)	11 (55.0)	7 (41.2)	.42	9 (52.9)	9 (45.0)	.68
Maternal depressive symptoms	12.3 (10.8)	13.7 (11.4)	10.7 (10.1)	.40	12.4 (12.4)	12.3 (9.5)	.96

SD, standard deviation; HS, high school.

*Adjusted for child weight status.

†Adjusted for maternal weight status.

some mothers disavowed responsibility for or distanced themselves from their child’s eating, perhaps suggesting a sense of shame or transmission of shame to their child.

The theme of maternal disavowal of responsibility for her child’s eating has not previously been identified in the literature. While prior work has described permissive parenting practices around child feeding (21), maternal disavowal of her child’s eating is distinct in that mothers conveyed a sense of ‘giving up’ on their child’s eating behaviour, and in doing so distanced themselves with an additional sense of shame. Prior work has found that shame can be successfully

identified from facial expressions (22). This behaviour was more often observed in mothers of children with obesity. Prior work (23) in the realm of general parenting has found that greater maternal expression of negative emotions through a narrative about her child was associated with maternal reported child behaviour problems. It may be that mothers in our study were similarly expressing their negative emotions towards their child’s behaviour in the domain of eating. Others (24) have hypothesized that maternal criticism of child behaviour may in fact be counterproductive in positively shaping the child’s behaviour. In our study, maternal disavowal of child behaviour was not found

Table 4 Correlations of covariates and counts of disavowal

Covariates	Correlation or Wilcoxon	<i>p</i> value
Child characteristics		
Age (months)	0.10	.55
Male sex (vs female)*	1.23	.23
Mother characteristics		
Age (years)	0.06	.70
White non-Hispanic race/ethnicity (vs other)*	0.11	.91
Highest level of education ≤ HS diploma (vs >)*	−0.29	.77
Single parent household	1.37	.18
Maternal depressive symptoms	−0.04	.84

*indicates that a Wilcoxon was used.

to be correlated with maternal depressive symptoms, whereas prior work (25) has found greater maternal depressive symptoms to be associated with more perceived child negativity, and greater controlling feeding practices.

There is substantial stigma associated with being the parent of a child with overweight or obesity (26). Mothers of children with overweight and obesity report feeling blamed and criticized for their child's weight (27). In qualitative work, low-income mothers report believing that childhood obesity is caused by inept or neglectful parenting (28). Parents may distance themselves from their child's eating behaviours as a defence against the societal stigma, shaming and blame associated with being the parent of a child with obesity. If mothers believe that having a child who enjoys junk food signals being a 'bad parent', distancing herself from her child's behaviours may be a way for the mother to communicate that the fault does not lie with her or her parenting, but with the child. Obesity prevention and intervention efforts that acknowledge the multifactorial aetiology of childhood obesity, emphasizing that it is not a result of 'bad parenting' while still highlighting the important role parents can play in shaping their children's healthy habits, may allow mothers to engage in managing their child's eating behaviours more sensitively.

Mothers of children with overweight and obesity also report feeling frustrated and powerless to change their child's weight status (26,29). Indeed, current guidelines (4,30) do not provide parents with guidance on how to sensitively handle situations in which their child is presented with a large portion of energy-dense food. Parents hear conflicting messages around restriction, as they are told both to limit intake of unhealthy foods, as well as not to restrict intake (4). Guidelines are needed that provide parents with adaptive and sensitive ways to limit their child's

intake of calorically dense, unhealthy foods. Because of the conflicting clinical and public health messages parents currently receive, some parents may simply be disengaging from managing the child's eating behaviour at all, as we observed here. Future work is needed to examine which approaches to parenting around children's eating behaviours are best for children's outcomes.

Mothers in this study may also be transmitting a sense of shame to their child in order to try to achieve behavioural control. Prior work (31) has suggested that parents use emotions such as shame as a tool to control the child's undesirable behaviours. Of note, there was no difference in the amount of cupcake consumed by children with and without obesity; however, mothers' use of disavowal was still higher in children with obesity. It may be that mothers of children with obesity are more acutely aware and attuned to their children's eating behaviour, and are using strategies such as shame and distancing themselves to try to control them. Future work should examine whether a mother's disavowal of responsibility for her child's eating increases linearly with child BMI percentile, or if it correlates with maternal concern for child weight.

Strengths of this study include the use of observational methodology in conjunction with qualitative and quantitative analyses. The study sample was relatively small, as is typical of mixed method studies; therefore, results should be interpreted with caution. The sample consisted of low-income mothers of 4–7-year-old children, most of whom were white non-Hispanic from a single geographic area; therefore, results may not be applicable to other populations. Although maternal obese weight status was not correlated with counts of disavowal, this difference in groups should be noted and may have influenced the ways in which mothers interact with their children. Mothers' behaviours may also have been influenced by social desirability bias conferred by the laboratory

setting. However, the setting has ecological validity to the extent that parents are frequently in public settings in which their management of their child's eating of palatable food is observed and judged.

Conclusion

Mothers of children with obesity often display disavowal of responsibility for their child's eating behaviours when their child is presented with a large portion of energy-dense food, especially when the child seemed to enjoy consuming the food. Parents may disengage from managing children's obesogenic eating behaviours due to the pervasive stigmatizing attribution of childhood obesity to bad parenting (26). Alternatively, they may disengage because current guidelines are silent on how to parent most effectively in these situations. Discussing the multifactorial aetiology of childhood obesity and the current obesity promoting environment, in addition to the important role parents can play in influencing their child's eating, may allow parents to develop more adaptive strategies for parents to manage their child's overeating. In addition, developing clearer recommendations for how parents may most effectively manage their children's inevitable encounters with calorically dense, palatable foods is a priority.

Conflict of interest statement

No conflict of interest was declared.

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MP, GV, KR, AM and JL conceived of the study design. GV conducted the discourse analysis. MP and DA analysed the data. All authors were involved in writing the paper and had final approval of the submitted version. The authors would like to thank Ms. Clare Lauer for her proofreading.

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Supporting information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Table S1. Additional themes from the discourse analysis that have been previously described in the literature, and illustrative examples from separate mother–child dyads in the present study