



Affective tone of mothers' statements to restrict their children's eating



Megan H. Pesch^{a,*}, Alison L. Miller^{b,c,d}, Danielle P. Appugliese^e,
Katherine L. Rosenblum^{b,f}, Julie C. Lumeng^{a,b,g}

^a Division of Developmental and Behavioral Pediatrics, Department of Pediatrics and Communicable Diseases, University of Michigan, 300 N. Ingalls Street, 1109 SE, Ann Arbor, MI 48109-5456, USA

^b Center for Human Growth and Development, University of Michigan, 300 North Ingalls Street, Ann Arbor, MI 48109-0406, USA

^c Department of Psychology, University of Michigan, 300 N. Ingalls Street, 10th Floor, Ann Arbor, MI 48109-5406, USA

^d Department of Health Behavior and Health Education, School of Public Health, University of Michigan, 3718 SPH Building I, Ann Arbor, MI 48109-2029, USA

^e Appugliese Professional Advisors, 5 Piece Way, North Easton, MA 02334, USA

^f Department of Psychiatry, Medical School, University of Michigan, 4250 Plymouth Road, Rachel Upjohn Building, Ann Arbor, MI 48109, USA

^g Department of Nutritional Sciences, School of Public Health, University of Michigan, 300 N. Ingalls Street, 10th Floor, Ann Arbor, MI 48109-5406, USA

ARTICLE INFO

Article history:

Received 11 March 2016

Received in revised form

4 April 2016

Accepted 12 April 2016

Available online 14 April 2016

Keywords:

Feeding behavior

Restriction

Mother

Child

Affect

Child obesity

ABSTRACT

Maternal restrictive feeding behaviors have been associated with child weight status. The affective tone of mothers' statements intended to restrict their children's eating has not been examined. The objectives of this study were to describe the affective tone of mothers' restrictive feeding behaviors (positive or negative), and to test the association of child and mother characteristics with rates of Restriction with Positive Affect, Restriction with Negative Affect and Total Restriction. A total of 237 low-income child-mother dyads (mean child age 5.9 years) participated in a videotaped standardized laboratory eating protocol, during which mothers and children were both presented with large servings of cupcakes. A coding scheme was developed to count each restrictive statement with a positive affective tone and each restrictive statement with a negative affective tone. To establish reliability, 20% of videos were double-coded. Demographics and anthropometrics were obtained. Poisson regression models were used to test the association between characteristics of the child and mother with counts of Restriction with Positive Affect, Restriction with Negative Affect, and Total Restriction. Higher rates of Restriction with Positive Affect and Total Restriction were predicted by child obese weight status, and mother non-Hispanic white race/ethnicity. Higher rates of Restriction with Negative Affect were predicted by older child age, child obese weight status, mother non-Hispanic white race/ethnicity, and lower mother education level. In conclusion, in this study mothers of obese (vs. non-obese) children had higher rates of restriction in general, but particularly higher rates of Restriction with Negative Affect. Rather than being told not to restrict, mothers may need guidance on how to sensitively restrict their child's intake. Future studies should consider the contributions of maternal affect to children's responses to maternal restriction.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Maternal restriction, defined as a mother's efforts to limit the total amount of food consumed by her child (Birch et al., 2001), has been linked with childhood obesity (Faith, Scanlon, Birch, Francis, & Sherry, 2004; Rollins, Savage, Fisher, & Birch, 2015) and may be an important target for intervention. It is theorized that excessive or

inappropriate parental control over children's diet and eating may lead to poorer child self-regulation of consumption (Birch & Fisher, 1998) by focusing the child's attention on external cues to eat, rather than internal cues of satiety. Alternatively, it has also been proposed that parents' restriction of child intake may be a response to a child's weight gain, rather than causal (Rhee et al., 2009). Much remains to be understood, however, about maternal restrictive feeding practices. Work to date examining restrictive feeding practices has primarily relied on maternal self-report (Faith et al., 2004; Rollins et al., 2015), and has conceptualized restrictive feeding as limiting the child's intake of unhealthy foods or limiting

* Corresponding author.

E-mail address: pesch@umich.edu (M.H. Pesch).

portion size. The manner in which parents communicate restriction to their children, however, has received little attention.

The affective tone, defined as the content, warmth and tone of voice with which a mother communicates restriction to her child, may be important not only with regard to the effectiveness of the mother's efforts to limit the child's intake, but also for the child's self-esteem and the parent-child relationship. A mother may gently tell her child that he or she may not have a second serving of an unhealthy food, or may harshly command her child to stop eating. Restricting children's intake with a harsh and shaming tone is clearly not desirable. However, restricting children's intake with a kind and supportive affective tone may be a valuable way to teach children self-regulation and manage children's eating behavior in an obesogenic environment.

To our knowledge, the affective tone of mothers' restrictive statements has not been previously examined. However, a related literature has described less optimal maternal affect and family emotional climate in association with less optimal child feeding (Frankel et al., 2015), problematic eating behaviors in children (Birch & Fisher, 1998; Hafstad, Abebe, Torgersen, & von Soest, 2013; Hughes et al., 2011), concern about child feeding (Hughes et al., 2011), and overweight in children and has highlighted the importance of examining affect as a contributor to the feeding interaction (Frankel et al., 2015). A better understanding of mothers' affective tone while restricting children's intake and predictors of this tone could inform child obesity interventions (Frankel et al., 2015; Hughes et al., 2011). In addition, identifying characteristics of the mother and child that predict mothers' affective tone while restricting intake could help to target potential participants in interventions.

Therefore, the first objective of the study was to describe the affective tone of mothers' statements intended to restrict their children's food intake in an observational feeding interaction with a snack food. The second objective was examine the association of child and mother characteristics with the affective tone of the mother's restriction.

2. Methods

2.1. Participants

Participants were a convenience sample of 237 low-income child-female primary caregiver dyads (mean child age 5.9 years) from Michigan who participated in an original longitudinal study examining contributors to children's risk of obesity from 2009 to 2011. Participants in the original study ($n = 380$) 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 behaviors. Participants were then followed longitudinally, and about two years later invited to participate in this follow-up study, which was explained as seeking to "understand how mothers and caregivers feed their children." Of the 296 female primary caregiver-child dyads participating in this study, 95% were biological mothers. The remaining 5% were adoptive mothers, stepmothers and grandmothers; henceforth we refer to the entire group as "mothers".

For the original study, exclusion criteria included the child having a gestational age less than 35 weeks, significant perinatal or neonatal complications, serious medical problems or food allergies, disordered eating or foster care or the mother not speaking English fluently and/or having more than a four-year college. As all child participants were originally recruited from Head Start, they were aged three to four-years and living in low-income families at the time of recruitment into the original study. The University of Michigan Institutional Review Board approved the study, and

mothers provided written informed consent and were compensated \$60 for their participation.

A total of 296 dyads participated. The Structured Eating Protocol (SEP) (Goulding et al., 2014; Pesch et al., 2016; Radesky et al., 2015) is a laboratory based eating interaction designed to capture children's and mothers' responses to different foods. Dyads were excluded ($n = 49$) from participating in this protocol if the mother had a food allergy or the child had a food allergy (which had developed since inclusion in the original study). An additional 3 dyads were not able to complete the SEP due to scheduling. Of the 244 who completed SEPs, 7 were excluded from this analysis for the following reasons: 2 for missing maternal body mass index (BMI), 1 for the child becoming ill during the protocol, 2 for the mother speaking a language other than English during the SEP, and 2 for the video being uncodable (due to noise or video recording malfunction). This resulted in a sample of 237 dyads.

2.2. Measures

2.2.1. Maternal restriction

Maternal restriction of child food intake was measured in the SEP, which is a standardized, structured eating protocol which has been described in detail elsewhere (Goulding et al., 2014; Pesch et al., 2016; Radesky et al., 2015). This protocol examines the mother's and child's responses to different types of foods in a laboratory setting, thereby reducing the broad variability that may occur during observations of home mealtimes (e.g., sibling interference, mother attending to other family members or food preparation, etc.).

The SEP has strong test-retest reliability across approximately two years, with correlations for the amount consumed by children for desserts ($r = 0.45$), vegetables ($r = 0.31$) and total amount of food consumed ($r = 0.43$; p -values for all statistics reported <0.05). Validity of the SEP is supported by correlations between mothers' encouragements or discouragements of their child's intake during the SEP, as measured by the Bob and Tom's Method of Assessing Nutrition (Klesges et al., 1983), and mother's feeding practices and beliefs as measured by the Caregiver Feeding Style Questionnaire (CFSQ) (Hughes, Power, Orlet Fisher, Mueller, & Nicklas, 2005) and the Preschooler Feeding Questionnaire (PFQ) (Baughcum et al., 2001). Higher rates of maternal total encouragements during the SEP correlated with more maternal demandingness ($r = 0.26$) as measured on the CFSQ. Higher rates of maternal total discouragements during the SEP correlated with higher maternal concern about her child overeating or becoming overweight ($r = 0.32$), as measured by the PFQ.

During the protocol, the mother and child were presented with individualized portions of four different foods by a research assistant. The four foods were presented one food at a time, sequentially and in randomized order, to the mother and child concurrently. These foods, which differed based on familiarity and sweetness (dessert vs vegetable) were: chocolate cupcakes (familiar dessert), green beans (familiar vegetable), halva (unfamiliar dessert) and artichoke (unfamiliar vegetable). The mother and child were seated at a table alone in a quiet room, and were videotaped throughout the entire procedure. After presentation of each food type, the mother and child were invited to try the food if they wanted, and left alone for 4 min. This study focused only on the videotaped segment of the protocol during which the mother and child were presented with chocolate cupcakes, as it was hypothesized that this palatable and familiar dessert, served in large portion size, would elicit restrictive feeding behaviors from the mothers. The mother and child were each served two cupcakes (Hostess Chocolate Cupcakes, 104.96 ± 0.5 g) and portion sizes for both were identical.

A coding scheme was developed to capture mothers' restrictive feeding behaviors. The coding scheme was created using an iterative

Download English Version:

<https://daneshyari.com/en/article/7307302>

Download Persian Version:

<https://daneshyari.com/article/7307302>

[Daneshyari.com](https://daneshyari.com)