

Young Mothers' Perception of Child's Weight Status is Related to Feeding Attitudes and Behavior

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Background & Methods

Background

- Parents, especially mothers, typically control the young child's food environment
- The degree of parental control (monitoring, restriction and pressure to eat) has been associated with child eating behavior (eating style, food preferences, and dietary intake) and weight status
- Parental child eating behaviors may be further influenced by the mother's weight related concerns for her child

Purpose

- To determine if there is a relationship between child feeding attitudes and behaviors of young mothers to maternal weight perception and concern about child overweight, and measure the strength of the relationship, if present

Methods & Measures

- Postpartum teen mothers (N=1330) enrolled in Moms 4 Healthy Balance (MFHB):
 - MFHB tested effectiveness of a weight reduction intervention delivered in home visits and school classes

- Modified Child Feeding Questionnaire (CFQ) mailed to 243 MFHB participants
- 32% response rate (N=77)
- Factors representing perceived maternal overweight, concern about child overweight, and attitudes and behaviors about child feeding were scored, ordered into two or three categories, and tested for independence or linear trend

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Results

Associations between maternal overweight perception and factors representing maternal concern about child overweight and attitudes and behaviors about child feeding

Subscale	Tertile	N	MN	Mothers Perceiving Themselves as Overweight	p-value	Kendall's tau-c
				%		
Concern About Child Overweight ^a	Lower	25	1.00	36.0	0.018 ^d	0.30*
	Middle	26	1.76	46.2		
	Upper	26	3.68	69.2		
Restriction ^b	Lower	23	2.10	47.8	0.224 ^e	n/a
	Middle	25	3.23	40.0		
	Upper	25	4.26	64.0		
Monitoring ^c	Lower	26	2.74	42.3	0.118 ^e	n/a
	Middle	24	4.07	41.7		
	Upper	27	4.67	66.7		
Pressure to Eat ^b	Lower	24	1.96	54.2	0.668 ^e	n/a
	Middle	25	2.96	44.0		
	Upper	27	3.93	55.6		

a = ordinal scale, '1-unconcerned', '2-slightly unconcerned', '3-neutral', '4-slightly concerned', and '5-concerned'
 b = ordinal scale, '1-disagree', '2-slightly disagree', '3-neutral', '4-slightly agree', and '5-agree'
 c = ordinal scale, '1-never', '2-rarely', '3-sometimes', '4-mostly', and '5-always'
 d = Mantel-Haenszel χ^2
 e = Pearson χ^2

Associations between maternal concern about child overweight and factors representing attitudes and behaviors about child feeding

Subscale	Tertile	N	MN	Mothers Concerned about Child Overweight	p-value	Kendall's tau-c
				%		
Restriction ^a	Lower	23	2.10	8.7	0.047 ^c	0.21*
	Middle	25	3.23	20.0		
	Upper	25	4.26	32.0		
Monitoring ^b	Lower	26	2.74	3.8	0.009 ^c	0.27*
	Middle	24	4.07	25.0		
	Upper	27	4.67	33.3		
Pressure to Eat ^a	Lower	24	1.96	25.0	0.729 ^d	n/a
	Middle	25	2.96	16.0		
	Upper	27	3.93	22.2		

a = ordinal scale, '1-disagree', '2-slightly disagree', '3-neutral', '4-slightly agree', and '5-agree'
 b = ordinal scale, '1-never', '2-rarely', '3-sometimes', '4-mostly', and '5-always'
 c = Mantel-Haenszel χ^2
 d = Pearson χ^2

Sociodemographic Characteristics (N = 77)

	MN, Min - Max
Age	20 years, 17 – 22 years
Race/Ethnicity	%
White, n=48	62.3
Black, n=10	13.0
White or Black Hispanic, n=17	22.1
Missing, n=2	2.6
Sample Domicile (state)	AL, AR, AZ, IA, IL, IN, KS, MI, MO, NC, NY, OH, OK, PA, SC, TX, WI

Discussion

- We found a positive relationship between a mother's weight perception and concern about her child's weight
- A mother's concern about her child's weight was positively related to restriction attitudes and monitoring behaviors
- There is no relationship between maternal weight and parental control feeding patterns or behaviors

Conclusions & Implications

- Young mothers who express concern about child overweight may exhibit unhealthy restriction and monitoring behaviors. More thorough study of child feeding attitudes and behaviors are needed to guide interventions promoting healthy feeding strategies

Associations between maternal overweight perception and maternal concern about child overweight, child feeding attitudes and behaviors among young mothers (n=77) with toddler age children

Mother's Perceiving Themselves as Overweight							
Subscale		N	MN	%	Pearson χ^2	Mantel-Haenszel χ^2	Kendall's tau-c
Concern about Child Overweight ^a	Lower	25	1.00	36.0	n/a	5.59*	0.30*
	Middle	26	1.76	46.2			
	Upper	26	3.68	69.2			
Restriction ^b	Lower	23	2.10	47.8	2.99	n/a	n/a
	Middle	25	3.23	40.0			
	Upper	25	4.26	64.0			
Monitoring ^c	Lower	26	2.74	42.3	4.27	n/a	n/a
	Middle	24	4.07	41.7			
	Upper	27	4.67	66.7			
Pressure to Eat ^b	Lower	24	1.96	54.2	0.81	n/a	n/a
	Middle	25	2.96	44.0			
	Upper	27	3.93	55.6			

a = ordinal scale, '1-unconcerned', '2-slightly unconcerned', '3-neutral', '4-slightly concerned', and '5-concerned'
 b = ordinal scale, '1-disagree', '2-slightly disagree', '3-neutral', '4-slightly agree', and '5-agree'
 c = ordinal scale, '1-never', '2-rarely', '3-sometimes', '4-mostly', and '5-always'
 *p<0.05

Associations between maternal concern about child overweight and child feeding attitudes and behaviors among young mothers (n=77) with toddler age children

Mother's Concerned about Child Overweight							
Subscale		N	MN	%	Pearson χ^2	Mantel-Haenszel χ^2	Kendall's tau-c
Restriction ^a	Lower	23	2.10	8.7	n/a	3.94*	0.21*
	Middle						
	Upper						
Monitoring ^b	Lower	26	2.74	3.8	n/a	6.87*	0.27*
	Middle						
	Upper						
Pressure to Eat ^a	Lower	24	1.96	25.0	0.63	n/a	n/a
	Middle						
	Upper						

a = ordinal scale, '1-disagree', '2-slightly disagree', '3-neutral', '4-slightly agree', and '5-agree'
 b = ordinal scale, '1-never', '2-rarely', '3-sometimes', '4-mostly', and '5-always'
 *p<0.05,

Table 2 – Characteristics of young mothers (n=77) with toddler age children and their perceived parental feeding responsibilities, perceived weight, child weight perceptions and overweight concerns, and attitudes and behaviors about child feeding

	MN, Min - Max				
Age	20 years, 17 – 22 years				
Race/Ethnicity	%				
White, n=48	62.3				
Black, n=10	13.0				
White or Black Hispanic, n=17	22.1				
Missing, n=2	2.6				
Sample Domicile (state)	AL, AR, AZ, IA, IL, IN, KS, MI, MO, NC, NY, OH, OK, PA, SC, TX, WI				
Subscale Scores	Median	Min	Max	Mean	SD
Perceived Feeding Responsibility ^a	5.00	3.00	5.00	4.70	0.50
Perceived Parent Weight ^b	3.33	2.33	4.33	3.23	0.35
Perceived Child Weight ^b	3.00	2.00	4.00	2.95	0.31
Concerns About Child Overweight ^c	1.67	1.00	5.00	2.16	1.24
Restriction ^d	3.25	1.00	5.00	3.23	0.96
Monitoring ^e	4.00	1.00	5.00	3.93	1.02
Pressure to Eat ^d	3.00	1.00	5.00	2.99	0.92

a = ordinal scale, '1-never...', '2-seldom...', '3-half the time...', '4-most of the time...', and '5-always responsible'

b = ordinal scale, '1-markedly under...', '2-under...', '3-average ...', '4-over...', and '5-markedly overweight'

c = ordinal scale, '1-unconcerned', '2-slightly unconcerned', '3-neutral', '4-slightly concerned', and '5-concerned'

d = ordinal scale, '1-disagree', '2-slightly disagree', '3-neutral', '4-slightly agree', and '5-agree'

e = ordinal scale, '1-never', '2-rarely', '3-sometimes', '4-mostly', and '5-always'