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Do Parents or Siblings Engage in More Negative Weight-Based Talk with Children and What Does it Sound Like?: A Mixed-Methods Study

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Abstract

The current mixed-methods study examined the prevalence of negative weight-based talk across multiple family members (i.e., mother, father, older/younger brother, older/younger sister) and analyzed qualitative data to identify what negative weight-based talk sounds like in the home environment. Children ($n = 60$; ages 9–12) and their families from low income and minority households participated in the study. Children reported the highest prevalence of negative weight-based talk from siblings. Among specific family members, children reported a higher prevalence of negative weight-based talk from mothers and older brothers. In households with younger brothers, children reported less negative weight-based talk compared to other household compositions. Both quantitative and qualitative results indicated that mothers' negative weight-based talk focused on concerns about child health, whereas fathers' and siblings' negative weight-based talk focused on child appearance and included teasing. Results suggest that interventions targeting familial negative weight-based talk may need to be tailored to specific family members.

Keywords

Parents; siblings; children; weight talk; weight teasing; obesity; Family; negative weight-based talk; mixed methods

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Familial negative weight-based talk, which includes weight teasing, negative comments about appearance, critical comments about one's body shape or size, and conversations about dieting, is common among youth (Berge et al., 2013, 2014; Neumark-Sztainer et al.,

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2002). Such weight talk, also referred to as “fat talk” (MacDonald et al., 2015), has been found to be associated with multiple negative health outcomes such as low self-esteem, depressive symptoms (Eisenberg, Neumark-Sztainer, Haines, & Wall, 2006), thinking about or attempting suicide (Eisenberg, Neumark-Sztainer, & Story, 2003), loneliness, poor self-perception of one’s physical appearance, a preference for sedentary activities (Hayden-Wade et al., 2005), overweight and obesity (Berge et al., 2014), unhealthy weight control behaviors (Libbey, Story, Neumark-Sztainer, & Boutelle, 2008) and disordered eating behaviors (Berge et al., 2013; Eisenberg, Berge, Fulkerson, & Neumark-Sztainer, 2012). Given the harmful outcomes associated with familial negative weight-based talk, it is important to understand more about familial sources of negative weight-based talk. For example, do parents or siblings engage in more negative weight-based talk, do older or younger brothers engage in more negative weight-based talk, and what does negative weight-based talk sound like in the home environment? Identifying which family members are engaging in more negative weight-based talk will allow for tailoring interventions to these family members in order to reduce the prevalence of familial negative weight-based talk.

Prior studies have indicated that approximately 25–60% of youth who are overweight report negative weight-based teasing from parents and/or family members (Keery, Boutelle, van den Berg, & Thompson, 2005; MacDonald et al., 2015; McCormack et al., 2011; Neumark-Sztainer et al., 2002, 2010). Additionally, studies have shown that negative weight-based talk by family members is associated with child and adolescent body dissatisfaction, unhealthy weight control behaviors, and depression (Eisenberg, Berge, Fulkerson, & Neumark-Sztainer, 2012; Greer, Campione-Barr, & Lindell, 2015; Keery et al., 2005; MacDonald et al., 2015), regardless of whether the child is overweight or normal weight.

While the potential deleterious effects of negative weight-based talk are known, the knowledge about specific sources of negative weight-based talk is limited, as well as what negative weight-based talk sounds like in the home environment. Most studies that have investigated negative weight-based talk focus on peer or family teasing. A few studies have included both parent and sibling variables (Greer et al., 2015; Schaefer & Salafia, 2014; Taylor et al., 2006), but to the best of our knowledge, only one study has examined family, parents, and siblings separately (Keery et al., 2005). In addition, the limited studies that have included siblings have been conducted mostly with Caucasian, mid- to higher-income participants.

Furthermore, qualitative research on weight talk/teasing in the home environment is limited. A previous qualitative study conducted by the authors of the current study found that families of children ages 6–12 engaged in: weight talk contradictions (i.e., said they didn’t talk about weight with their children, but then gave examples of when they did use weight talk/teasing), overt and covert weight talk/teasing, and reciprocal teasing (Berge, Trofholz, Fong, Blue, & Neumark-Sztainer, 2015); however, this previous study did not examine which specific family members were engaging in weight talk/teasing.

The current mixed-methods study addresses limitations in previous research in two ways. First, it examines the prevalence of negative weight-based talk across mothers, fathers, older/younger brothers, and older/younger sisters and examines the likelihood of engaging in

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negative weight-based talk by family member. Second, it analyzes qualitative data to provide a more in-depth picture of what negative weight-based talk sounds like in the home environment. Furthermore, the study sample includes children from minority and low-income populations, who are under-represented in studies examining familial negative weight-based talk.

Family systems theory (Bateson, 1972; Doherty & McDaniel, 2010; von Bertalanffy, 1968) guided the study design, research questions, and data analysis of the current study. Family systems theory purports that the family is the most proximal level of influence on a child's behavior and can either exacerbate or decrease the likelihood of any given behavior being expressed. Family systems theory also focuses on relational connections between family members and how these interconnections can influence individual behavior, as well as family-level behavior. For example, a child may experience negative weight-based talk from a family member. This in turn may increase the child's negative emotional response, triggering the child to emotionally eat. This increase in unnecessary calories could result in the child gaining weight, thus increasing the likelihood of experiencing more negative weight-based talk. Overweight and obesity therefore becomes a familial-sustained problem.

The current study addresses the following research questions: (a) Who are the main sources of negative weight-based talk among family members (mother, father, older/younger brother, older/younger sister)?; (b) Which family members are most likely to engage in negative weight-based talk?; and (c) What does familial negative weight-based talk sound like in the home environment? Understanding familial sources of negative weight-based talk and examples of what negative weight-based talk sounds like in the home environment may be useful in informing the development of family-based obesity prevention interventions to reduce the mental and medical health risks associated with familial negative weight-based talk in children (Berge et al., 2013, 2014; Eisenberg et al., 2003, 2012; Hayden-Wade et al., 2005; Libbey et al., 2008; Neumark-Sztainer, Haines, & Wall, 2006). Additionally, this study will set the stage for future work examining familial negative weight-based talk with larger racially/ethnically diverse samples.

Method

Sample and Study Design

Family Meals, LIVE! is a mixed methods, cross-sectional study conducted in Minneapolis/St. Paul, Minnesota. The main aim of the study is to identify key risk and protective factors for childhood obesity in the home environment (Berge, Rowley, et al., 2014). Children ($n = 120$) and their families from four primary care clinics serving racially/ethnically and socioeconomically diverse families participated in the study. A recruitment letter from the child's primary care doctor was sent to the primary caregiver/parent inviting the child and their family to participate in the Family Meals, LIVE! study. Eligibility criteria included: (a) children had to be between the ages of 6–12 years old; and (b) all family members had to speak and read English.

Of the 120 children participating in the study, 54% were boys and 46% were girls, with an average age of 9 ($SD = 2$, range 6–12). The majority (91%) of parents/guardians were

mothers or other female guardians (e.g., grandparents, aunts) and were approximately 35 years old (*SD* = 7, range 25–65). The racial/ethnic backgrounds of the participating children were as follows: 64% African American, 13% Caucasian, 3% American Indian, 4% Asian, and 16% mixed or other race/ethnicity; parents were similarly diverse. The majority of parents had finished high school but had not attended college, and about 50% of parents were working full or part time. Over 70% of the children were from very low socioeconomic status households (< $35,000 annual household income).

Procedures

Children and their families participated in two home visits, two weeks apart (Berge, Rowley, et al., 2014). The first home visit included training parents/families on how to collect direct observational data on their family meals. Results from the direct observational components of the study are described elsewhere (see Berge, Rowley, et al., 2014). In the second home visit, a quantitative survey was administered to the child and primary caregiver/parent and a qualitative interview was conducted with the primary caregiver/parent. Parents were interviewed by research staff who had been trained in conducting qualitative individual interviews (Crabtree & Miller, 1992). The interview questions (described below) allowed for an in-depth exploration of key issues surrounding weight talk and teasing in the home environment. The quantitative surveys and qualitative interviews conducted with parents were utilized for analysis in the current study. All participating family members provided consent or were assented into the study on the first home visit. All study protocols were approved by the University of Minnesota's Institutional Review Board.

Research team—Research team members who conducted the qualitative interviews (*n* = 6) included full-time research staff and research assistants who were graduate students in the department of family social science or the school of public health at the University of Minnesota. Team members were between the ages of 25–40 years and represent a combination of Caucasian, African American, and Hispanic racial/ethnic groups. Before conducting any home visits or analyses, presentations on cultural aspects of research and potential biases when conducting research with racially/ethnically and socioeconomically diverse participants were delivered. Research staff and research assistants conducted all in-home visits in dyads.

Measures

Negative weight-based talk—Negative weight-based talk was assessed using survey questions adapted from the Inventory of Peer Influence on Eating Concerns (I-PIEC; Oliver & Thelen, 1996). Children ages 9–12 (n=60) were administered the adapted I-PIEC via an iPad. They were asked the following questions: (a) "Has your [mother, father, older and younger brother, older and younger sister, and non-family members]…ever said you were fat?", (b) "Has…ever teased you or made fun of you about the size or shape of your body?", (c) "Has…ever said that you should go on a diet?", (d) "Has…ever said that you eat food that will make you fat?, (e) "Has…ever said that you would look better if you were thinner?" Response options were "Yes," "No," or "I do not have a [mother, father, younger/older brother, younger/older sister]."

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Qualitative interviews—Individual interviews with parents were conducted in-person during the second home visit. The qualitative interview guide was created to elicit parents' perspectives regarding several home environment factors that are potential risk or protective factors for childhood obesity (e.g., family meals, weight and weight-related conversations, healthful eating, sedentary behavior). Weight talk and weight teasing were a main focus of the interviews because of the limited prior research examining specifics related to weight talk and teasing in the home environment such as, how and why families engage in weight talk and teasing, how parents respond to weight talk and teasing, and whether cultural background influences weight talk and teasing in the home environment. The specific interview questions used in the analysis of the current study included: (a) "How does the topic of weight come up in your family? What is an example?"; (b) "How do you talk about weight with your children?"; and (c) "What happens when someone gets teased about their weight or appearance in your household?"

Statistical Analysis

Quantitative analysis—Descriptive statistics were calculated to examine demographic and behavioral differences based on weight status and sex. For descriptive purposes, percentages for each of the five adapted I-PIEC negative weight-based talk questions were calculated for individual sources (e.g., mothers, older sisters, or younger brothers) and for three summary group sources (family, parents, or siblings). The family-level prevalence proportion of negative weight-based talk was calculated for the five questions and for the summary item. For example, if a child who was a member of a five person household reported negative weight talk from three family members on the I-PIEC, then the family-level prevalence proportion of negative weight talk was calculated to be .60 (i.e., 3/5 = .60). The minimum prevalence proportion was 0.00 (the child reported no family member as a source of negative weight talk), and the maximum prevalence proportion was 1 (the child reported all family members as sources of negative weight talk). A dichotomous summary measure "any negative weight-based talk" was constructed from the five individual I-PIEC questions and coded "1" if any (or all) five individual questions reflected negative weight talk from mother, father, and the four sibling category sources. This measure was assigned a value of "0" if the five questions reflected the absence of negative weight talk across all five domains.

Family systems theory (Bateson, 1972; Doherty & McDaniel, 2010; von Bertalanffy, 1968) posits that relational connection between family members can influence individual-level behaviors. To examine how relational connections may affect a child's experience of negative weight talk, general linear models with Gaussian variance family and identity link were applied to examine the association between household composition and the family-level prevalence proportion of negative weight talk. Household composition was operationalized by indicator coding each sibling type and single/two-parent household status (two-parent household set to the reference category). Statistical adjustment for household composition, child weight status, and child sex was applied in all analyses. Sampling weights were used to produce estimates that were generalizable to the clinic level population. Analyses were performed in Stata 13.1 SE (StataCorp, College Station, TX 77845).

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Qualitative analyses—Tape-recorded interviews ($n = 60$) were transcribed verbatim. An inductive content analysis approach was used to analyze the data, which allows for themes to naturally emerge from the data (Elo & Kyngas, 2008). First, constant comparison using line-byline coding was conducted to identify broad response themes. The broad themes were then broken into sub-themes to organize participant responses across all content areas discussed by participants. Then, major overarching themes were identified across content areas and subcategories were collapsed where appropriate. All parent transcripts were analyzed and coded to ensure saturation of themes occurred. During the coding process, the first 20 transcripts were coded by both coders (second and third authors of this paper) and then consensed. Once the coders reached 95% inter-coder reliability (Miles & Huberman, 1994), every fifth interview was double coded and consensed. Cronbach kappas ranged from .95-.98 on each qualitative theme. During consensus, both coders discussed questions in-person regarding quotes or placement of quotes in theme categories until 100% agreement was reached (Addison, 1999). Themes are not mutually exclusive. All names have been changed to protect participant confidentiality. NVivo 10 qualitative analysis software was used to organize and code the data.

Results

Quantitative Results

Prevalence results—The majority of children aged 9–12 years (60%) reported experiencing negative weight-based talk from a family member (see Table 1). Almost half (43%) reported experiencing negative weight-based talk by parents, and 59% reported experiencing negative weight-based talk from siblings.

Among individual family members, children reported that mothers (42%) were making almost twice as many negative weight-based statements as fathers (26%; see Table 1). In households where there were two parents ($n = 45$), 24% of children reported negative weight-based talk from both parents (see Table 2). Among siblings, children reported the highest prevalence of negative weight based talk among older brothers (33%), followed by younger sisters (26%), younger brothers (22%), and older sisters (19%; see Table 1).

Overall, parental comments tended to focus on eating behaviors linked to their child's weight and health (i.e., dieting and eating foods that won't make one fat), while siblings tended to focus on appearance-based weight comments (i.e., calling someone fat and making fun of body shape and size).

Regression results—The relationship between specific family members and the likelihood of family level prevalence of experiencing negative weight-based talk indicated that the presence of a younger brother in the household was associated with a lower prevalence of negative weight-based talk (for items: "any negative weight-based talk" and "eating food that will make you fat," $p < .05$) after controlling for all other covariates in the model (see Table 3). Household compositions with the presence of an older brother, older sister, or younger sister were not found to be statistically related with higher or lower prevalence of negative weight-based talk in the family for any of the five negative weight-based talk items.

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Qualitative Results

Themes found in the qualitative analysis will be presented below by mothers', fathers', and siblings' negative weight-based talk. Two main themes were found for mothers (i.e., negative weight-based talk focused on concerns about child's health; negative weight-based talk used to bring weight status to their child's attention for weight loss), one main theme for fathers (i.e., negative weight-based talk focused on specific child body parts), and two main themes for siblings (i.e., negative weight-based talk used through humor; negative weight-based talk used through a teasing tone).

Mothers' negative weight-based talk—Two main themes were found regarding mothers' negative weight-based talk with their children. First, mothers (63%) used negative weight-based talk to address their child's weight because of a concern about their child's health. For example, one mother (White, 39 years) said, "I tell her she's still beautiful, but she has to lose a little bit of weight for her health." Another mother (African American, 28 years) said, Well, I might say, "you are a little big, and you should, you know, think about trying to lose weight because if you don't you may get diabetes when you are older. Another mother (African American, 32 years) stated,

> I address it head on, like, 'you need to drop a few pounds for your health'… especially because kids nowadays are courting so many things, like obesity, high blood pressure, and it could get the better of them someday.

Second, mothers (40%) used negative weight-based talk to bring the issue of weight status to their child's attention so they would lose weight. One mother (African American, 35 years) said,

> Well, I tease my son sometimes. I'm like, 'You're chunky.' Or like, 'You're big,'… I try not to call him fat, but he needs to know that he needs to lose weight.

Another mother (African American, 27 years) said,

> I have 2 pictures I show her, a big person and a thin person. And I ask her 'what do you want to be when you grow up, you want to be this person or you want to be that person?'…then she understands that she needs to eat less.

Overall, qualitative themes found for mothers corroborated the quantitative findings for negative weight-based talk. Specifically, mothers' negative weight-based talk tended to focus on worries about child health due to their child's weight status.

Fathers' negative weight-based talk—One main theme regarding negative weight-based talk was found for fathers. Fathers (38%) focused on specific body parts as a way of highlighting the need for their child to lose weight. One father (African American, 29 years) said he tells his child, "You need to quit eating so much…just look at your thighs…you need to lose weight." Another father (Native American, 22 years) stated, "I see you're getting bigger in your stomach, you need to slow down and get this [weight] under control." One father (African American, 26 years) said,

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> We tell him his butt is getting bigger. I tell him that he's got to lose that weight if he's gonna play basketball or any sport…that it won't be the ball he's dribbling down the court if his butt keeps getting bigger.

Overall, the main qualitative theme found for fathers showed that fathers tended to focus on specific body parts when using negative weight-based talk, which was different than mothers' focus on child weight status as a way of addressing child health concerns.

Siblings' negative weight-based talk—Parents also gave their perspective regarding the types of negative weight-based talk siblings engaged in. Two main themes were found for siblings in relation to using negative weight-based talk. First, parents (68%) identified that siblings used humor as a way to tease one another about weight through direct put-downs. Additionally, the negative weight-based talk was focused on appearance or body shape/size of the sibling. One mother (White, 24 years) said, "Yeah, they all [siblings] kind of poke fun at each other, like they say, 'Your butt looks huge in those pants' or, 'Oh, you're so fat. Lose weight.' Another father (African American, 27 years) stated, "My son likes to mess with his sister and will call her [sister] 'fatty watty'." Another father (African American, 23 years) said, They're so used to messing with one another about it [weight]… both of them poke fun at it [weight]… my son will say to his younger sister, 'Those pants are getting a little tight,' you know, stuff like that. A mother (White, 25 years) stated, "…my son and daughter will just go back and forth giving put-downs to the other about some body part, like 'big butt,' 'fat face,' or 'jelly belly.'"

Second, parents (65%) indicated that siblings would use a teasing tone when engaging in negative weight-based talk. One mother (White, 30 years) said, "When Steve teases Erika he'll almost sing it, like, 'you're so fat, *na-na-na-na-na*.'" A father (African American, 29 years) stated, "my son will say 'ha, ha you're *sooo* fat' to my daughter."

Overall, qualitative themes found for siblings corroborated the quantitative findings for negative weight-based talk. Specifically, siblings' negative weight-based talk focused on child appearance and tended to include elements of teasing.

Discussion

Descriptive results from the current study indicated that the majority of children reported experiencing negative weight-based talk from one or more family member. Children reported siblings as sources of negative weight-based talk more often than parents. In addition, older brothers were the most commonly reported source of sibling negative weight-based talk, followed by younger sisters, younger brothers, and older sisters. Results also indicated that having younger brothers in the household was related to lower levels of negative weight-based talk compared to children with younger sisters, older sisters, or older brothers. Furthermore, children who reported hearing negative weight-based comments from a parent reported that mothers were the source almost twice as often as fathers. These results corroborate limited prior research showing a high prevalence of overall family negative weight-based talk in racially/ethnically diverse families (Keery et al., 2005; Neumark-Stzainer et al., 2002; Taylor et al., 2006).

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Study findings also extend previous research by identifying specific familial sources of negative weight-based talk, which may inform family-based interventions regarding which family members engage in more negative weight-based talk with children and which may need to be specifically targeted in interventions. These new findings set the stage for future research on negative weight-based talk in the home environment. For example, future research should examine whether reducing negative weight-based talk among siblings lowers the risk of overweight/obesity in children.

In addition, study results extend prior research by showing that mothers, fathers and siblings use different types of negative weight-based talk. Specifically, sibling negative weight-based talk focused on physical appearance such as being fat, body size and shape, or consuming foods that would make them fat. This finding is consistent with limited prior research showing the majority of sibling weight teasing focuses on appearance (Keery et al., 2005; Taylor et al., 2006). Mothers tended to engage in negative weight-based talk that focused more on food and losing weight for one's health, rather than on physical appearance. Whereas, based on the qualitative findings, fathers tended to use negative weight-based talk to focus on children's specific body parts. Thus, mothers may make negative weight-based comments, particularly around food, thinking they are helping their child to be healthier, or in response to a concern about a child's health, whereas fathers may make comments about specific body parts because they think children will be able to focus on changing those specific body parts. However, even though parents may have "good intentions" in using negative weight-based talk to encourage their children to lose weight, the comments used by parents may be experienced as weight stigma by their children. Studies on weight stigma indicate that children who experience weight stigma from parents or family members are at increased risk for disordered eating behaviors (Carels & Latner, 2016; Jendrzyca & Warschburger, 2016; O'Brien et al., 2016).

The current study results may have implications for family-based interventions targeting the reduction of negative weight-based talk with children and for future research. For example, it may be important to tailor interventions to focus on reducing weight-based talk with parents and to focus on reducing physical appearance-based talk with siblings. This would be important because prior research conducted with a similar racially/ethnically and socioeconomically diverse sample has shown that discussing the weight or size of the child, or giving them suggestions to eat differently with the focus on losing weight, is associated with increased risk for negative health outcomes such as disordered eating behaviors and overweight (Berge et al., 2013, 2014). Additionally, research on weight stigma suggests that comments made by parents with the intent to make children aware of their own weight promotes self-consciousness/awareness by the child that their body shape/size is somehow different from other children's body shape/size. This experience of weight stigma is associated with an increased risk of engaging in disordered eating behaviors (Carels & Latner, 2016; Jendrzyca & Warschburger, 2016; O'Brien et al., 2016).

Results of the current study may also have implications for healthcare providers and educators. It may be important to educate parents and families on how to recognize negative weight-based talk. While teasing about body weight, shape, or size may be commonly acknowledged as negative weight-based talk, discussing food in terms of "things that will

make you fat" or suggesting dieting may not be recognized as potentially harmful. Explaining the broader definition of negative weight-based talk, and its health outcomes, to parents and families may help them avoid its use in the home. Providers and educators may want to inform parents and families about how to talk about children's health and weight in ways that diminish the potential negative health outcomes of negative weight-based talk. For instance, instead of discussing foods in terms of fattening or non-fattening they could be discussed in terms of healthfulness and not connect these comments to the child's weight. Previous research with racially/ethnically diverse children supports this suggestion because findings have shown that parents who focus on "healthy eating" versus "weight-focused conversations" have children who are at reduced risk of disordered eating behaviors and obesity (Berge et al., 2013).

There were several strengths of the current study. First, this mixed-methods study conducted an in-depth assessment using both qualitative and quantitative data of the specific familial sources of negative weight-based talk. Additionally, this study was guided by family systems theory, which provided a systemic view of the home environment in order to identify which family members are most likely to engage in negative weight-based talk. In addition, participants in the study were from low income and minority households, which extends prior literature using more homogenous samples. Limitations of the study should also be considered when interpreting the findings. First, the study sample size was small, and generalizability of the results is limited. Future research is needed to confirm these preliminary results with larger samples. Another limitation of this study was the inability to stratify analyses, or adjust analyses, by parent weight status due to the small sample size. It would be important for future research to incorporate parent weight status into analyses. For example, if parents have a larger body shape/size, their comments to their child could be reflective of their own insecurities regarding their own weight.

Conclusions

Findings from the current mixed-methods study indicate that children experience the highest prevalence of negative weight-based talk from siblings. Among specific family members, children experience a higher prevalence of negative weight-based talk from mothers and older brothers. Furthermore, in households where there was a younger brother, children experienced less negative weight-based talk compared to children from households with other sibling configurations. Both quantitative and qualitative results found that when mothers used negative weight-based talk they focused on child's weight status because of concerns about their child's health, whereas fathers tended to focus negative weight-based talk on specific child body parts. Additionally, siblings' negative weight-based talk focused on appearance and tended to include teasing. Given these findings, there are potential implications for health care providers and health educators who work with children and families and for future research. For example, it may be important for health care providers and educators to assess the level of negative weight-based talk children experience in the home and to educate parents about negative weight-based talk and its stigmatic nature, the impact of negative weight-based talk and internalized weight stigma, and how to avoid using negative weight-based talk in the home.

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Highlights

- Mixed methods study examining familial negative weight-based talk
- Moms and older brothers had the highest prevalence of negative weight-based talk
- Having a younger brother was associated with less negative weight-based talk
- Mothers' negative weight-based talk focused on child's weight and health concerns
- Siblings' negative weight-based talk focused on child's appearance and used teasing

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Table 1

Prevalence Proportion of Negative Weight-Based Talk by Family Member Relationship Category

	Proportion of Children Reporting Negative Weight-based Talk by Family Relationship Category			Proportion of Children Reporting Negative Weight-based Talk by Individual Family Member					
Survey Item	**Family (*n* = 60)**	**Parents (*n* = 60)**	**Siblings (*n* = 54)**	**Mother (*n* = 59)**	**Father (*n* = 46)**	**Older Brother (*n* = 43)**	**Older Sister (*n* = 36)**	**Younger Brother (*n* = 32)**	**Younger Sister (*n* = 31)**
Any negative weight-based talk	60%	43%	59%	42%	26%	33%	19%	22%	26%
Said you were fat	38%	12%	37%	8%	7%	16%	14%	16%	26%
Teased about the size or shape of body	38%	15%	33%	14%	7%	21%	8%	16%	23%
Should go on diet	23%	18%	9%	15%	9%	0%	6%	6%	6%
Eat food that will make you fat	32%	23%	20%	22%	15%	7%	11%	3%	16%
Would look better thinner	12%	10%	2%	10%	0%	0%	0%	0%	3%

Note. Interpretation Example: 60% of children reported some form of negative weight-based talk from at least one family member. Children reported that the source of any negative weight-based talk came from a parent 43% of the time and from siblings ($n = 54$) 59% of the time.

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Table 2

Prevalence Proportion of Negative Weight-Based Talk Among Dual Parent Households

	Proportion of Children Reporting Negative Weight-based Talk in Dual Parent Households (Mother/Father, n = 45)		
Survey Item	***Only Mother***	***Only Father***	***Both Parents***
Any negative weight-based talk	18%	2%	24%
Said you were fat	9%	4%	2%
Teased about the size or shape of body	7%	2%	4%
Should go on diet	13%	4%	4%
Eat food that will make you fat	9%	2%	13%
Would look better thinner	7%	0%	0%

Note. Interpretation Example: 18% of children reported any negative weight-based talk only from the mother.

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Table 3

Association between Household Composition and the Prevalence of Negative Weight Talk among 9–12 Year Old Children

	Parameter Estimates				
	Single Parent Household (Ref: Dual Parent Household, n=45)	***Sibling Composition (Ref: Sibling Category Absent)***			
Survey Item	Single Parent (*n*=15)	Older Brother (*n* = 43)	Older Sister (*n* = 36)	Younger Brother (*n* = 32)	Younger Sister (*n* = 31)
Any negative weight-based talk	–0.01 (–0.09, 0.08)	0.00 (–0.10, 0.10)[ab]	–0.05 (–0.14, 0.05)[ab]	**–0.10 (–0.17, –0.03)**[†b]	0.02 (–0.05, 0.10)[a]
Said you were fat	0.00 (–0.13, 0.13)	0.07 (–0.07, 0.21)[a]	–0.06 (–0.21, 0.08)[ab]	–0.10 (–0.21, 0.01)[b]	0.11 (–0.01, 0.22)[a]
Teased about the size or shape of body	0.06 (–0.06, 0.18)	0.15 (–0.02, 0.33)[a]	–0.16 (–0.32, 0.00)[bc]	–0.07 (–0.21, 0.07)[ac]	–0.05 (–0.19, 0.08)[ac]
Should go on diet	–0.07 (–0.16, 0.03)	–0.11 (–0.25, 0.03)[a]	0.03 (–0.09, 0.15)[a]	–0.07 (–0.15, 0.01)[a]	0.01 (–0.08, 0.10)[a]
Eat food that will make you fat	–0.09 (–0.24, 0.06)	–0.06 (–0.28, 0.17)[ab]	–0.03 (–0.23, 0.16)[b]	**–0.27 (–0.42, –0.13)**[†a]	0.05 (–0.11, 0.20)[b]
Would look better thinner	0.04 (–0.04, 0.12)	–0.03 (–0.09, 0.03)[a]	–0.02 (–0.07, 0.04)[a]	–0.01 (–0.04, 0.03)[a]	0.00 (–0.04, 0.05)[a]

[†] Coefficient is significant at $p<.05$

1. Models are adjusted for: household composition, child overweight, and child sex

2. Sibling coefficients that do not share a superscript letter are significantly different at $p<.05$

3. Interpretation Example: The presence of a younger brother wasassociated with a –0.27 (95% CI: –0.42, –0.13) lower negative weight talk, prevalence proportion. Comparisons between siblings indicate that the effect of younger and older brother did not statistically differ ($p>.05$), but the younger brother effect was statistically different from older and younger sister ($p<.05$).