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ORIGINAL ARTICLE

"I just don't want to be fat!": body talk, body dissatisfaction, and eating disorder symptoms in mother–adolescent girl dyads

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Abstract

Purpose Mothers serve as a primary socializing figure among adolescent girls at a time when they are at high risk of body image concerns and disordered eating behavior, and this influence may vary by weight status. Body talk may be one mechanisms of influence in this relationship. The current study utilized an observational measure of body talk to investigate the relationship between adolescent girls' body talk with mothers, eating disorder symptoms, and body dissatisfaction.

Methods Participants included 100 mother–daughter dyads who completed self-report measures of body dissatisfaction and eating behavior and engaged in a 10-min discussion about the daughter's body image.

Results Results indicated that the relationship between both positive and negative body talk and body dissatisfaction varied by weight status. For healthy/underweight adolescents, negative body talk is related to higher body dissatisfaction ($b = 0.04$, SE 0.01, $p < 0.01$) and positive talk is related to lower body dissatisfaction ($b = -0.06$, SE 0.02, $p < 0.001$). No relationship was found for individuals of overweight/obese status. Body talk was unrelated to eating disorder symptoms for all adolescents.

Conclusions Given the current findings, mothers should continue to limit their engagement in body talk (particularly negative talk) within the home.

Level of evidence V, cross-sectional descriptive study.

Keywords Body talk · BMI · Body dissatisfaction · Eating disorder symptoms · Parent–child · Adolescence

Introduction

Estimates indicate that nearly 4% of adolescent females experience an eating disorder by their adolescent years [1], with even more suffering from subclinical symptomatology, such as body dissatisfaction, food/calorie restriction, binging, and over-exercising. Body image concerns in this population may be impacted by several factors, such as body mass index (BMI), pubertal status, and external influence from parents, peers, and the media through appearance comparison and internalization of the thin ideal [2]. Family is one of the most important socialization agents predicting body dissatisfaction and eating disorder symptoms, and family communication is a major mechanism of parental influence on the body image disturbances of adolescent daughters [3]. Through discussion of weight and shape, parents may contribute to the intergenerational transmission of the thin ideal [4], informing their daughters of what bodies are considered "acceptable" through their comments about themselves and others. When these discussions highlight inconsistencies between the unattainable ideal and the adolescent's body, individuals may experience cognitive dissonance, exacerbating body image concerns.

Two bodies of literature have addressed family communication about weight and shape. Weight management talk has been widely studied in parent–adolescent relationships, focusing primarily on weight control and dieting conversations, with the parental goal of managing their child's weight [5, 6]. This kind of weight talk refers to the parent's comments about their child's weight directed to or in front of the child, comments about their own weight or weight loss goals, and/or comments about someone else's weight [7]. It is associated with increased body dissatisfaction and unhealthy weight control behaviors in the child, such as fasting, dieting, binge/purging, using diet pills, or engaging in extreme exercise; this talk is not associated with any kind of healthy weight control strategies (i.e., portion sizes,

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avoiding pop, etc.) [5]. This talk is common (occurring in 2/3 of households with adolescents) [6], and its influence is lasting; parent encouragement to diet during adolescence is associated with numerous negative outcomes (i.e., obesity, dieting, binge eating, body dissatisfaction) even 15 years later in adulthood [8]. While these findings are telling about the role of a parent's weight-related comments in adolescent body image, they are unidirectional from parent to child, denying any active role of adolescents. From early to late adolescence, the parent–child relationship shifts from more hierarchical to egalitarian [9]; for this reason, the assumption of unilateral (parent to child) influence should not be made.

An independent line of research investigates how body talk, or mutual discussion about body image within close relationships (i.e., friends, family members), appears to be related to negative outcomes of disordered eating and increased body dissatisfaction [10]. Body talk is defined as the way in which individuals engage in mutual disclosure of thoughts, emotions, or attitudes about their own body with a conversation partner; this talk may include negative talk (i.e., "My thighs are too fat") and positive talk (i.e., "I like how my body looks"). Thus far, negative body talk has received more emphasis in the literature [11]. Negative body talk exists within the mother–daughter relationship [4]; however, very little is known about the conditions under which this talk occurs or its association with other psychological variables, especially among adolescents. Most negative body talk research has focused on peer relationships within emerging adult or undergraduate populations. Among this age group, engagement in negative body talk is associated with negative psychological [11, 12] and eating-related outcomes, such as dieting, drive for thinness, and bulimic symptoms [12]. Experimental studies have indicated that negative body talk is a direct precursor to increased negative outcomes such as dieting [12].

Interestingly, some research suggests that for individuals of overweight status, negative body talk may serve as a social support function, buffering the relationship between BMI and undesirable outcomes [13, 14]. Therefore, more research on negative body talk is warranted, particularly utilizing different methodologies (i.e., observation) and populations (i.e., adolescent girls).

Much less research has focused on the associations of positive body talk. While positive body talk has been suggested as a point of intervention for body image problems and disordered eating [15], research on positive body talk and its association with body image and disordered eating has been somewhat contradictory. Some researches have indicated that positive body talk is associated with positive outcomes, such as friendship quality, self-esteem, and body satisfaction [11]. Positive body talk from parent to child may be protective against body dissatisfaction in the child [16]. However, positive body talk may also have concerning negative correlates. Past research has indicated that positive body talk may be uniquely detrimental for individuals of a higher weight status, intensifying the relationship of BMI with dieting and bulimic symptoms [17]. Further research using more varied methodology and populations beyond the peer group is needed to better understand how positive body talk may interact with personal factors (e.g., BMI).

In addition to body talk, person characteristics, such as weight status, appear to be another risk factor for body dissatisfaction and eating disorders among adolescent girls. Multiple studies have suggested that adolescent girls of a higher weight status experience increased body dissatisfaction and pathological eating behaviors compared to those of normal weight [18]. Tiggemann suggests that person factors, such as BMI, interact with environmental factors in the prediction of body image. Specifically, body image varied across environments for normal weight women at a higher level than for underweight or overweight women, which suggests that normal weight women are more impacted by environmental factors, because their identification with a specific level of body image may be less certain [19]. For the purposes of the current study, it is likely that person factors, such as BMI, and environmental factors, such as engagement in body talk, are each directly related to the way in which women evaluate their bodies. Further, environmental factors (e.g., body talk) may interact with person factors (e.g., BMI) in predicting body image.

The current study

The current study makes several meaningful contributions to the literature. First, the study examined the construct of body talk, instead of weight management talk, within the mother–daughter relationship during adolescence that would expand the knowledge of how mutual disclosure of body image concerns or satisfaction would be related to body dissatisfaction and eating disorder symptoms. Second, instead of solely focusing on negative body talk, the current study also examined the positive body talk dynamic which was assumed to be protective of body image issues. Third, the current study utilized an observational method for capturing body talk between mothers and daughters, which addressed potential self-report biases in past research. Based on past research, the following was hypothesized:

1. High engagement in dyadic negative body talk would be related to high adolescent body dissatisfaction and eating disorder symptoms.
2. High engagement in dyadic positive body talk would be related to low adolescent body dissatisfaction and eating disorder symptoms.

3. High adolescent BMI percentile would be related to high adolescent body dissatisfaction and eating disorder symptoms.
4. Dyadic negative body talk was expected to interact with adolescent BMI in the prediction of body dissatisfaction and eating disorder symptoms, with negative body talk serving as a risk factor for low weight individuals and a protective factor for individuals of a higher weight status.
5. Dyadic positive body talk was expected to interact with adolescent BMI in the prediction of body dissatisfaction and eating disorder symptoms, with positive body talk serving as a protective factor for low weight individuals and a risk factor for individuals of a higher weight status.

Method

Participants

Participants for the current study consisted of 100 adolescent girls (aged 10–18 years) and their mothers. Recruitment was conducted via online and physical flyers advertising a study about health and relationships in mother–daughter relationships. Interested mothers and daughters contacted the researcher to schedule an appointment to come to the lab for the study. Overall adolescent mean age was 14.50 ($SD = 2.31$), and mother's mean age was 44.01 ($SD = 7.27$). Mother's report of adolescent race was 48% Caucasian, 30% African American, 15% mixed race/other, 4% Asian, 2% Hispanic, and 1% Middle Eastern. The majority of mothers reported that they had at least college-level education (90%).

Procedure

The current study was approved by the EMU Human Subjects Review Committee. Mothers and daughters were recruited from a metropolitan area in the Midwestern USA. After individuals consented (daughters under 18 provided assent), mothers and daughters were separated into two rooms to complete a series of computer-administered survey measures. Then, mothers and daughters were asked to complete a video-recorded story creation task with one another; those data are not reported in this study. Lastly, the mothers and daughters were asked to have a 10-min video-recorded discussion about the adolescent's thoughts and feelings about her body. Mother–daughter dyads were asked to talk about (a) things the adolescent would like to change about her body and why, (b) her concerns about losing weight, (c) the importance of a better-looking body, and (d) how body weight and shape impact her relationship with others, including friends, any romantic partners, and her mother.

Table 1 Weight categories of participants' BMI

	Mothers ($M = 30.28$; $SD = 7.53$)		Daughters ($M = 64.50$; $SD = 27.57$)	
	Frequency	Percent of total (%)	Frequency	Percent of total (%)
Underweight	1	1.01	2	2.30
Healthy weight	24	24.24	61	70.11
Overweight	32	32.32	10	11.49
Obese	42	42.42	14	16.09

Above percentages are based off of complete data ($n_{mother} = 99$, $n_{adolescent} = 87$)

Measures

Demographic questionnaire

Mothers were asked about the family's household income, which was used as a proxy for socioeconomic status (SES); mothers chose an income category from a 6-point scale ranging from "Under $15,000" to "Over $95,000". The average rating ($55,000–75,000) is consistent with the median income in the county in which the study took place. Mothers' and adolescents' birthdate, height, and weight were used to calculate their BMI ($= kg/m^2$) and BMI percentile, respectively. BMI scores for mothers and daughters were then converted to categories based on Centers for Disease Control and Prevention's guidelines. Table 1 shows the breakdown of mothers and daughters by BMI category. For analysis, underweight and healthy weight individuals were grouped together under the label "healthy/underweight"[1] and overweight and obese individuals were grouped together under the label "overweight/obese."

Body dissatisfaction

Daughter's body dissatisfaction was assessed using the body dissatisfaction subscale of the Eating Disorder Inventory (EDI-BDS) [20]. This subscale includes 9 items measuring dissatisfaction with various parts of one's body, such as "I think that my thighs are too large." Participants rated their agreement with each item on a 6-point Likert scale from 1 (never) to 6 (always), and items were averaged, with higher scores reflecting higher levels of body dissatisfaction. In the current sample, reliability was good ($\alpha = 0.84$).

[1] All analyses were also conducted with underweight individuals omitted. The pattern of significant results was unchanged. For this reason, underweight individuals were included in the analysis in the group "healthy/underweight" to retain power.

Table 2 Means, standard deviations, and correlations of study variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Adolescent age	14.39	2.30								
2. Mother age	44.01	7.24	0.23*							
3. SES	3.99	1.64	− 0.12	0.37***						
4. Mother BMI (0 = healthy/underweight, 1 = overweight/obese)	–	–	− 0.12	− 0.07	− 0.13					
5. Adolescent BMI (0 = healthy/underweight, 1 = overweight obese)	–	–	0.13	0.00	− 0.08	0.25*				
6. Negative talk	9.64	8.11	0.14	0.14	− 0.07	− 0.02	0.22*			
7. Positive talk	5.58	4.73	− 0.11	− 0.05	0.01	− 0.15	− 0.29**	0.13		
8. Body dissatisfaction	2.52	0.98	0.19	0.16	− 0.07	0.08	0.42***	0.33**	− 0.31**	
9. Eating disorder symptoms	7.15	6.78	0.33**	0.09	− 0.18	0.02	0.15	0.13	− 0.10	0.49***

M and *SD* are used to represent mean and standard deviation, respectively. The values in this table are based off of maximum likelihood estimation rather than complete data. As such, they may vary slightly from descriptive values reported in the text

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$

Eating disorder symptoms

Eating disorder symptoms were assessed using the 26-item Eating Attitudes Test (EAT-26) [21] which measured currently occurring eating disorder symptoms. Although the items were rated with a 6-point scale from 1 (never) to 6 (always), the responses were then converted and scored as a 0–3 scale [21]. Items were summed up to create a final score, with higher scores on the scale indicating greater symptomology. In the current sample, reliability was good ($\alpha = 0.76$).

Body talk

Behavioral observation was used to assess the pair's level of engagement in positive and negative body talk. The 10-min interpersonal interaction was coded for content falling within both categories. The author and a trained researcher coded each video in 10-second intervals, indicating whether the dyad engaged in negative talk, positive talk, or neither [22]. Negative and positive body talk were conceptualized as distinct constructs rather than opposing extremes of a single continuum. Negative body talk included any indication of body weight or shape dissatisfaction through direct disclosure (e.g., I don't like how I look), comparison to others (e.g., Emily's thighs are so slim), wishes (e.g., I wish that I had a flat stomach), fears (e.g., I'm worried about getting fat), or negative experiences associated with weight or shape (e.g., I hate that people judge me because I'm bigger). In contrast, positive body talk included any positive disclosures of body satisfaction through direct disclosure (e.g., I generally like how I look), comparison to others (e.g., I look better than Sammy), or contentment (e.g., I don't have any complaints). The two constructs were not mutually exclusive, so dyads could be recorded as participating in both negative and positive body talk within a single interval. Because of the dyadic nature of body talk, the individual participant's behaviors were not recorded; rather, if either member of the pair engaged in body talk, it was recorded as dyadic engagement. Adequate reliability was found for double-coded videos (20% of total) for both negative talk ($\kappa = 0.76$) and positive talk ($\kappa = 0.78$).

Results

Data screening and preliminary analyses

Preliminary analyses were conducted using R statistical software, version 3.5.2 [23]. All variables of interest were inspected for univariate and multivariate normality using the MVN package in R [24]. A Henze–Zirkler's test revealed that the multivariate normality assumption was not met, with $HZ = 1.12$, $p < 0.001$. Because the assumption of normality was violated, to address non-normality and missing data, in addition to preserving the original measurement scales, the maximum likelihood robust (MLR) estimator [25] was used for the key analyses. Bivariate correlations, means, and standard deviations of all study variables are presented in Table 2.

Primary analyses

Body dissatisfaction

A hierarchical regression (with MLR estimator) was conducted to predict body dissatisfaction in adolescent girls (see Table 3). In Step 1, covariates age and family SES

Table 3 Predicting body dissatisfaction

	b	SE	*z*	ΔR^2
Step 1				0.055
Adolescent age	0.067	0.040	1.695	
Mother age	0.016	0.014	1.158	
SES	− 0.062	0.061	− 1.013	
Step 2				0.259***
Adolescent age	0.004	0.039	0.091	
Mother age	0.027*	0.013	2.089	
SES	− 0.089	0.054	− 1.658	
Mother BMI	− 0.135	0.204	− 0.662	
Adolescent BMI	0.661**	0.219	3.023	
Negative talk	0.025*	0.011	2.315	
Positive talk	− 0.052**	0.016	− 3.245	
Step 3				0.038*
Adolescent age	− 0.007	0.038	− 0.195	
Mother age	0.031*	0.013	2.462	
SES	− 0.104	0.055	− 1.880	
Mother BMI	− 0.073	0.207	− 0.353	
Adolescent BMI	0.722*	0.298	2.424	
Negative talk	0.038**	0.012	3.215	
Positive talk	− 0.063***	0.017	− 3.722	
Negative talk × Adol. BMI	− 0.043*	0.018	− 2.392	
Positive talk × Adol. BMI	0.118*	0.058	2.058	

Unstandardized regression coefficients (*b*), standard errors (SE), *z* statistic, and ΔR^2 for stepwise regression predicting body dissatisfaction. Step 1 model: $R^2 = 0.055$; Step 2 model: $R^2 = 0.314$; Step 3 model: $R^2 = 0.352$

*$p < 0.05$, ** $p < 0.01$, ***$p < 0.001$

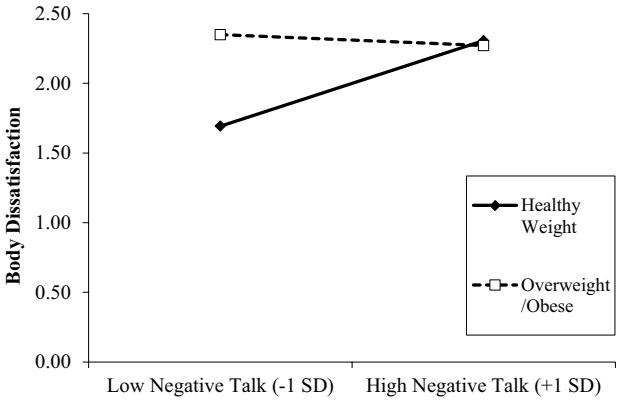

Fig. 1 Interaction effect of BMI and negative body talk for predicting body dissatisfaction

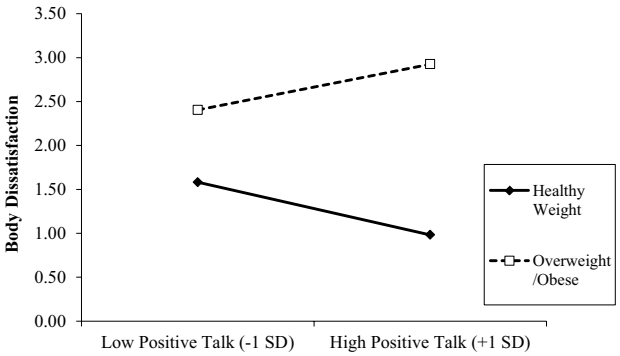

Fig. 2 Interaction effect of BMI and positive body talk for predicting body dissatisfaction

together did not account for the significant amount of variance in body dissatisfaction, $\Delta R^2 = 0.06$, $p = 0.10$. In Step 2, mother BMI, adolescent BMI, negative talk, and positive talk were added to the model in addition to age and SES. The change in variance accounted for was significant, $\Delta R^2 = 0.26$, $p < 0.001$. The findings showed that adolescent BMI and negative body talk were both positively related to body dissatisfaction; positive body talk was negatively related to body dissatisfaction.

In Step 3, the two-way interactions (adolescent BMI × negative talk and adolescent BMI positive talk) were entered into the model. The change in variance accounted for was significant, $\Delta R^2 = 0.04$, $p < 0.05$. Examining the individual beta weights showed that BMI and negative body talk interacted to predict body dissatisfaction. The significant interaction effect was then further probed by plotting the simple slopes by weight categories (0 = healthy/underweight, 1 = overweight/obese) and ± 1 standard deviation of negative body talk (see Fig. 1). It appears that increased engagement in negative body talk is uniquely related to body dissatisfaction among adolescents of healthy/underweight ($b = 0.04$, SE 0.01, $p < 0.01$). However, negative body talk is not associated with body dissatisfaction for adolescents of overweight or obese weight status, who already show higher levels of body dissatisfaction ($b = -0.01$, SE 0.01, $p = 0.71$).

Additionally, the interaction term between BMI and positive body talk was significant. Figure 2 shows that engagement in positive body talk is uniquely protective against body dissatisfaction among adolescents of a healthy/underweight status ($b = -0.06$, SE 0.02, $p < 0.001$). For individuals of overweight/obese weight status, positive body talk is not associated with body dissatisfaction ($b = 0.06$, SE 0.06, $p = 0.32$).

Eating disorder symptoms

A hierarchical regression (with MLR estimator) was conducted to predict eating disorder symptoms in adolescent girls (see Table 4). In Step 1, covariates age and family SES together accounted for a significant amount of variance in eating disorder symptoms, $\Delta R^2 = 0.13$, $p < 0.01$. The findings showed that older adolescents reported more eating

Table 4 Predicting eating disorder symptoms

	b	SE	*z*	ΔR^2
Step 1				0.130**
Adolescent age	0.849**	0.285	2.975	
Mother age	0.087	0.101	0.863	
SES	− 0.698	0.472	− 1.480	
Step 2				0.015
Adolescent age	0.630*	0.293	2.150	
Mother age	0.142	0.133	1.066	
SES	− 0.837	0.521	− 1.605	
Mother BMI	0.296	1.580	0.187	
Adolescent BMI	1.397	1.982	0.705	
Negative talk	0.056	0.098	0.572	
Positive talk	− 0.098	0.103	− 0.952	
Step 3				0.006
Adolescent age	0.638*	0.288	2.217	
Mother age	0.154	0.132	1.165	
SES	− 0.943	0.493	− 1.914	
Mother BMI	0.208	1.548	0.134	
Adolescent BMI	− 0.228	2.810	− 0.081	
Negative talk	0.030	0.114	0.265	
Positive talk	− 0.128	0.095	− 1.344	
Negative talk × Adol. BMI	0.032	0.208	0.155	
Positive talk × Adol. BMI	0.376	0.667	0.565	

Unstandardized regression coefficients (*b*), standard errors (SE), *z* statistic, and ΔR^2 for stepwise regression predicting bulimic symptoms. Step 1 model: $R^2 = 0.130$; Step 2 model: $R^2 = 0.145$; Step 3 model: $R^2 = 0.151$

*$p < 0.05$, ** $p < 0.01$, ***$p < 0.001$

disorder symptoms (see Table 4). In Step 2, mother BMI, adolescent BMI, negative talk, and positive talk were added to the model in addition to age and SES. The change in variance accounted for was not significant, $\Delta R^2 = 0.02$, $p = 0.70$. In Step 3, the two-way interactions (adolescent BMI × negative talk and adolescent BMI × positive talk) were entered into the model. The change in variance accounted for was not significant, $\Delta R^2 = 0.01$, $p = 0.80$.

Discussion

Predicting body dissatisfaction

The current findings suggest adolescents with higher BMI and who engage in more negative body talk with their mothers experience higher levels of body dissatisfaction. Furthermore, the current study also showed the relationship between negative body talk and body dissatisfaction varied by BMI, with increased engagement in negative body talk related to higher body dissatisfaction only for adolescents of healthy/underweight status. For overweight and obese adolescents, body dissatisfaction was already high and not related to their level of engagement in negative body talk. This finding is consistent with past findings that healthy weight individuals are more susceptible to the impact of environmental factors (such as negative body talk) on body image, perhaps due to an ambivalent or flexible sense of body image that is more easily influenced by external factors than that of an adolescent of higher weight status [19]. In this way, heavier adolescents have a more stable sense of high body dissatisfaction that is less associated with their engagement (or lack of engagement) in negative talk about their bodies. These findings are consistent with a cognitive dissonance hypothesis; for adolescents with a healthy body weight, discussion of undesirable body features may produce dissonance, motivating the adolescent to display more body dissatisfaction to reduce her internal inconsistencies. However, little is known about the mechanism of change involved in the relationship between body talk and body dissatisfaction. It is feasible that other processes may also be at work, such as social comparison or the eliciting of negative effect through negative discussion.

Regarding positive talk, the current study suggests that adolescents who engaged in higher levels of talk with their mother reported less body dissatisfaction than those who engaged in low levels of positive talk. This is consistent with some past research suggesting that positive talk is related to both greater body and life satisfaction [11, 16]. Also, positive body talk did interact with BMI in the prediction of body dissatisfaction, serving as a protective factor for individuals of healthy/underweight status. Consistent with Tiggeman's person × environment hypothesis [19], positive talk appears more strongly related to body image outcomes among individuals of healthy weight. However, the current study did not support the idea that positive talk can serve as a risk factor for adolescents of higher weight status [17]. This is somewhat surprising, given the societal expectation that overweight adolescents experience negative evaluations of their body, it was expected that engagement in positive talk would create dissonance and further draw the adolescent's attention to this negative evaluation. While this relationship was not significant in the current study, positive talk and body dissatisfaction did have a positive (though non-significant) relationship for overweight/obese adolescents. Because of this, future research should consider the possibility that positive talk may be related to adverse outcomes among overweight/obese girls before overgeneralizing the protective properties of positive talk beyond healthy/underweight adolescent/parent dyads.

Predicting eating disorder symptoms

Inconsistent with the hypotheses, neither negative body talk, positive body talk, nor BMI was related to eating disorder

symptoms among adolescent girls within the current study. Given the correlation between body dissatisfaction and eating disorder symptoms ($r = 0.49$), it is somewhat surprising that none of the study variables of interest were related to eating disorder symptoms within the current sample. Studies utilizing self-report of engagement in negative body talk have found its association with both subclinical and diagnostic disordered eating behavior among adolescent and adult women [12]. The lack of significant findings in the current study may be related to the limited variance in eating disorder symptoms reported by adolescent participants. Within the current sample, adolescents reported an average EAT-26 score of 7.15, considerably below the clinical cutoff of 20. Additionally, it is important to note that the coding scheme utilized in the current study assesses primarily cognitive and affective processes (e.g., thoughts and feelings about one's body) and eating disorder symptoms refer to a behavioral process. Such a gap may explain the lack of association between body talk and eating disorder symptoms. Future research could consider coding for plan-related talk in addition to evaluative and affective body talk. Finally, it is possible that eating disorder symptomology was not effectively measured by the EAT-26; this is further discussed below.

Limitations and future directions

First, while the observational method of assessing body talk is a strength of the study, the unnatural environment of the laboratory may not fully capture the body talk in which families typically engage in their day-to-day lives. It is feasible that the prompted discussion results in higher levels of body talk than would be typical or that the video-taped interaction discourages the kind of disclosure that might occur in a more natural environment. Future research may adopt an ecological momentary assessment (EMA) of body talk that involves repeated sampling of mother–daughter mutual disclosure of weight and shape in real time and natural environment.

Second, the data are correlational and we are unable to suggest causation between variables. Although we conceptualized body talk as a predictor variable, is it possible that adolescents who experience higher body dissatisfaction engage in increased negative body talk as a consequence of their poor body image (or positive body talk as a consequence of their low body dissatisfaction). The mechanisms at work in this relationship remain largely unknown. Future research may adopt a longitudinal method to detangle the complex association between body dissatisfaction, body talk, and mediating processes such as self-esteem, social comparison, or cognitive dissonance within the family context.

Third, it is possible that outcome variables were not adequately measured with the scales used in this study. While the (EAT-26) is a widely used measure of eating disorder symptomatology among both adults and adolescents [21], it may be better utilized with a clinical sample. The traditional three-factor model has not been well supported among adolescent community populations [26]. Given the relatively low symptomatology in this community sample, the EAT-26 may not be able to measure the desired construct of eating disorder symptoms in this population, limiting our ability to draw conclusions about the relationship between body talk and eating disorder symptoms.

Finally, the current coding scheme of body talk did not consider different strategies that mothers used to address their daughters' body image concerns during the body talk conversation. Indeed, past research shows that maternal supportive (instead of non-supportive) messages during a conversation on weight management can effectively motivate adolescent girls to enact healthy behaviors [27].

Clinical implications

The current study also has clear implications for clinical interventions. Negative body talk researchers have noted the potential for intervention to reduce negative body talk as a way of lowering risk for body dissatisfaction and other undesirable body image consequences [12]. It has also been suggested that parents should ban all negative body-related talk from their homes [28]. The current study reports only aversive correlates of high engagement in negative body talk. As such, psychoeducation about this risk factor could be targeted to parents and adolescents to reduce the occurrence of negative talk within the home, particularly for youth who are not overweight or obese. While positive body talk appears to be a protective factor for healthy weight adolescents, the unclear relationship between positive talk and body dissatisfaction among heavier adolescents indicates that it may be best to avoid any body-related talk altogether. Parents should be encouraged to avoid making evaluative statements about their daughters' or their own bodies, perhaps focusing instead on behaviors that promote a healthy lifestyle. Some hopeful research suggests that taking a more feminist approach to body talk, responding with comments related to the body's feel, strength, or personal value rather than evaluative comments, may be associated with less negative effect [29].

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Compliance with ethical standards

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of Eastern Michigan University Human Subjects Review Committee.

Informed consent Informed consent was obtained from mothers for themselves and their adolescent daughters; daughters under 18 provided assent to participate.

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