

Developmental changes in fat talk to avoid peer rejection in Japanese girls and young women

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Abstract

“Fat talk” refers to conversations focused on body disparagement. We examined developmental changes in fat talk to avoid social rejection and the mediating role of fat talk between “thin-ideal” internalization and body dissatisfaction. A total of 214 high school girls and 227 college-aged women completed questionnaires assessing fat talk engagement, body dissatisfaction, thin-ideal internalization, and sensitivity to rejection. Path analyses showed that fat talk mediated between thin-ideal internalization and body dissatisfaction and that rejection sensitivity predicted fat talk among high school girls, but not among college women. The purpose of fat talk differed by developmental stage, suggesting that interventions for improving body image should be developmentally tailored.

Keywords

adolescents, body dissatisfaction, fat talk, self-disparaging, social rejection

Introduction

“Fat talk” has recently received attention from scholars as a social ritual that may contribute to the development of body dissatisfaction (Arroyo and Harwood, 2012; Shannon and Mills, 2015). Nichter and Vuckovic (1994) coined the term “fat talk” to refer to the disparagement of their bodies; this includes talking about body size, weight, diet, and exercise. Since then, additional studies have explored the role of fat talk on pathological eating behaviors (Shannon and Mills, 2015; Sharpe et al., 2013).

Body dissatisfaction has been extensively studied as a risk factor for disordered eating behaviors among young women (Stice, 2002; Striegel-Moore and Bulik, 2007) and as an underlying factor of both psychological and behavioral health, including smoking (Stice and Shaw, 2003), low self-esteem (Paxton et al., 2006), and depression (Paxton et al., 2006). Scholars have postulated that body dissatisfaction can be attributed to societal beliefs regarding thinness (Keery et al., 2004; Thompson and Stice, 2001). Individuals develop dissatisfaction with their own appearances as they internalize the “thin-ideal” of the broader society. Thompson and Stice (2001: 181) defined thin-ideal internalization as “the extent to which an individual cognitively buys into socially defined ideals of attractiveness and

engages in behaviors designed to produce an approximation of these ideals.”

Sociocultural explanations of body dissatisfaction about thin-ideal claim that thin-ideal internalization is enhanced by exposure to idealized images of female bodies via various media messages and interpersonal pressure (Dittmar et al., 2006; Farooq and Latif, 2012). The tripartite model proposed by Thompson et al. (1999) conjectures that the media, parents, and peers significantly promote thin-ideal internalization and body dissatisfaction. Many authors have asserted that the mass media plays a role in promoting thin-ideal internalization (Grabe et al., 2008) and body dissatisfaction (Groesz et al., 2002; Want, 2009). Similarly, the roles of family and peers have been studied regarding the development of the thin-ideal and body dissatisfaction, including friends’ frequent comments on weight and diet (Forney et al., 2012), mothers’ thin-ideal internalization (Yamazaki and Omori, 2016), and college roommates’ comments (Keel and Forney, 2013).

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While previous research has successfully depicted the effects of media, family, and peers on body dissatisfaction, the impact of interpersonal interactions on a daily basis has not been well explored. Fat talk received attention because it addresses how daily conversations affect ones' body dissatisfaction as normative experiences among young women (Arroyo and Harwood, 2012; Salk and Engeln-Maddox, 2011). According to the Salk and Engeln-Maddox's (2011) study with 186 undergraduate women in the United States, 93 percent of participants engaged in fat talk, and 60 percent of participants responded that they felt body dissatisfaction when they heard fat talk. The impact of the fat talk engagement on body dissatisfaction has been supported in the literature (Jones et al., 2014; Sharpe et al., 2013). Sharpe et al. (2013) found significant associations between fat talk and body dissatisfaction in their systematic review of 24 studies. Thus, fat talk has been regarded as an unhealthy form of communication (Bardone-Cone et al., 2016). Further exploration of fat talk is expected to extend our understanding of how societal pressure to be thin is internalized through social interactions with peers and family members.

A qualitative survey on fat talk by Nichter and Vuckovic (1994) examined the role of fat talk on interpersonal relationships. They found that middle school girls engaged in fat talk to avoid social rejection and maintain group affiliations. For example, in their interview, a girl said, "I have a feeling she does it just because everyone else does it." Thus, the engagement in fat talk appears to be closely related to peer relationships during adolescence. Indeed, developmental psychologists have addressed the importance of peer group relationships during early adolescence and they have focused on social rejection as an entity affecting psychosocial adjustment (e.g. Zimmer-Gembeck et al., 2016). As for peer group relations among adolescent girls, attributes of friendship have been shown to change over time (e.g. Matsumoto, 2016; Sugiura, 2000). For example, Matsumoto (2016) reported that high school students were more likely to behave in comparable ways with friends and to favor peers compared with college students. This propensity was more pronounced among girls than boys. Concerning girls' avoidance of peer rejection, a similar finding was obtained in a cross-sectional study that revealed that middle school girls had higher sensitivity to rejection compared to college women (Sugiura, 2000).

Similar to findings on adolescent girls' attempts to avoid peer rejection, several studies on fat talk have revealed that young women sense expectations to participate in fat talk when observing friends engaging in fat talk (Cruwys et al., 2016; Martz et al., 2009). Cruwys et al. examined relationships among fat talk, thin-ideal internalization, and dieting intentions using an experimental design, where they manipulated fat talk in participants' actual friendship groups. They revealed that when women perceived that friends were following group norms of fat talk, either pro- or anti-fat talk, they perceived their friends positively. Given the

evidence for developmental changes in peer relationships and fat talk engagement as a reflection of social relationships, it is possible that fat talk engagement may change over the course of development. Whereas young girls in early and middle adolescence may engage in fat talk as a means of avoiding social rejection, those in late adolescence may not necessarily engage in fat talk for the same purpose.

The aforementioned thin-ideal internalization and body dissatisfaction have long been viewed as normative among young women in Western societies (Neumark-Sztainer et al., 2002; Rodin et al., 1984), and such views have been supported by empirical research. For example, compared to Caucasian girls, African-American girls have less weight-related concerns (Neumark-Sztainer et al., 2002; Warren et al., 2005). Studies on fat talk also appear to support the notion that thin-ideal internalization is unique to Caucasians. For example, Nichter (2000) reported that African-American girls engage in fat talk less than Caucasian girls, suggesting that the frequency and content of fat talk differ between cultures. Furthermore, several studies showed that women engage in fat talk more than men (e.g. Martz et al., 2009).

However, recent findings from non-Western countries have challenged these cultural differences in the thin-ideal by demonstrating associations between body dissatisfaction and pathological eating behaviors among non-Caucasians as well (Omori et al., 2017). In this study, we focused on fat talk in Japanese women for two reasons. First, despite low body mass index (BMI), a number of Japanese women complain about their body weight or shape and report a desire to be thinner (Ikeda et al., 2017). There was a surprisingly high rate of low-weight women reported by the Ministry of Health, Labour and Welfare in Japan (2018). Specifically, over 20 percent of teenage girls and women in their 20s were low-weight (BMI < 18.5). Despite these findings, most Japanese women reported feeling that they were expected to be thin even if they were not obese (Mukai et al., 2018), and the rate of Japanese women who were dissatisfied with their bodies was higher than other countries such as China, Jordan, the Philippines, and the United States (Madanat et al., 2011; Yates et al., 2004).

In addition, Japan is considered to be a collectivistic culture (Markus and Kitayama, 1991); thus, adolescents' social relationships may differ from those in individualistic cultures, such as the United States, where previous fat talk studies have been conducted. Cultural variations in the magnitude of social rejection have been found in previous studies where sensitivity to social rejection was higher in East Asians compared to North Americans (Sato et al., 2014). Sato et al. focused on relational mobility as a contextual factor for sensitivity to social rejection. Relational mobility refers to the opportunities that individuals have to form new relationships (Sato et al., 2014). In societies that are low in relational mobility, interpersonal bonds are established through enforced social networks, and new

interpersonal relationships are likely to be unavailable. In such environments, individuals constantly overestimate social rejection and are motivated to be accepted within their society (Sato et al., 2014). Considering such a social context, we hypothesize that sensitivity to social rejection is strongly related to fat talk among women in Japan.

As most research has been conducted in Western countries, data from Eastern cultures are needed so that prevention programs that are culturally tailored can be developed to address body image concerns and pathological eating behaviors. Consequently, we sought to examine the role of fat talk on thin-ideal internalization and body dissatisfaction among young Japanese girls and women.

The purpose of this study was twofold: (1) to examine associations among sensitivity to rejection, thin-ideal internalization, fat talk, and body dissatisfaction, and (2) to compare relationship patterns between fat talk and its correlates between high school and college students. The following hypotheses were tested: (1) sensitivity to social rejection would predict fat talk engagement in younger adolescents, but not older adolescents, and (2) fat talk would mediate the relationship between thin-ideal internalization and body dissatisfaction.

Method

Participants and procedures

Participants were high school girls ($M_{age} = 16.59$; $SD = 0.97$ years) and college women ($M_{age} = 19.60$; $SD = 1.19$ years) in Japan. Data collection was conducted at two high schools ($n = 214$) and one university in Tokyo ($n = 227$). At the two high schools, homeroom teachers distributed questionnaires, and the completed questionnaires were collected using sealed envelopes. For the university students, the authors of this study distributed the questionnaires after class, and participants returned completed questionnaires in designated boxes. All participants were informed about the purpose of this study and asked to fill out questionnaires independently. They were also informed that they were free to withdraw at any time and that questionnaires did not include information that could be used to identify individuals. Only students who voluntarily agreed to participate completed the questionnaires. For the high schools, 214 questionnaires were collected (School 1: $n = 101$; School 2: $n = 113$). For the university, 231 questionnaires were collected, and 4 questionnaires were excluded. The study protocol was approved by the Ethics Review Board of Humanities and Social Sciences Research at Ochanomizu University.

Measures

Sociocultural Attitudes toward Appearance Questionnaire (SATAQ-1). Thin-ideal internalization was assessed using the Japanese version of SATAQ-1 (Saito, 2004). Originally

developed by Heinberg et al. (1995), the SATAQ-1 assesses how women recognize and accept social standards of appearance. It involves two subscales—Internalization and Awareness. In this study, we used the Internalization subscale for its relevance to the construct of interest (e.g. “Women who appear in TV shows and movies project the type of appearance that I see as my goal”). Participants rated the extent to which they agreed with eight items on a five-point Likert-type scale (1 = *disagree*; 5 = *agree*), with higher scores reflecting greater thin-ideal internalization. The SATAQ demonstrated good internal consistency in both our samples (high school girls: Cronbach’s $\alpha = .91$; college women: Cronbach’s $\alpha = .86$).

Affiliation Motives Scale. Sensitivity to rejection was measured using the Affiliation Motives Scale (Sugiura, 2000). The scale consists of 18 items comprising two subscales: Sensitivity to Rejection and Affiliative Tendency. In this study, we used only the Sensitivity to Rejection subscale. The Sensitivity to Rejection subscale was employed to assess the degree to which individuals feel anxious about being rejected by their peers. Participants responded to items on five-point Likert-type scale, with responses ranging from 1 = *disagree* to 5 = *agree*. Higher scores reflect greater sensitivity to rejection (e.g. “I do not want to be alone” and “I want to get friends as many as possible”). The scale demonstrated good internal consistency across both samples (high school girls: Cronbach’s $\alpha = .88$; college women: Cronbach’s $\alpha = .84$).

Fat Talk Scale. The Japanese version of the Fat Talk Scale was used to measure the degree of fat talk engagement. Devised by Arroyo and Harwood (2012), the original scale is an 18-item self-report measure of fat talk comprising six topics: (1) what one’s eating and exercise habits should be; (2) fear about becoming out-of-shape or overweight; (3) how one’s eating and exercise habits compare to others; (4) other people’s shape and appearance; (5) one’s own weight, shape, or diet; and (6) supplements, meal replacements, or muscle-building strategies. Yamazaki et al. (2017) translated this scale with the assistance of native speakers, and back translated it independently. The items of the scale yielded three factors: “body shape dissatisfaction,” “fear of fat,” and “comparison with others.” Yamazaki et al. examined its internal consistency (Cronbach’s $\alpha = .76-.89$), convergent validity (with appearance-related self-esteem: $r = .03-.60$), and test-retest reliability ($r = .70-.82$). The 18 items asked the frequency of conversations on the above topics on a seven-point scale (1 = *absolutely never*; 7 = *one or more times per day*). Higher scores reflect more frequent engagement in fat talk. The scale exhibited good internal consistency in both samples of this study (high school girls: Cronbach’s $\alpha = .94$; college women: Cronbach’s $\alpha = .93$).

Table 1. Descriptive statistics and t test results of variables for high school girls and college women.

	High school girls		College women		t	p
	M	SD	M	SD		
Sensitivity to rejection	3.47	0.85	3.52	0.69	0.69	.492
Thin-ideal internalization	3.29	0.86	3.25	0.87	0.46	.644
Fat talk engagement	2.55	0.95	2.53	0.93	0.26	.799
Body dissatisfaction	4.20	0.82	4.34	0.92	1.70	.090
Body mass index	19.72	1.92	20.22	2.02	2.65	.008

SD: standard deviation; M: mean.

Eating Disorder Inventory (EDI). The EDI was developed to assess attitudinal and behavioral traits associated with eating disorders (Garner et al., 1983). The EDI was translated into Japanese by Shimura et al. (1994) and comprises eight subscales measuring Drive for Thinness, Bulimia, Body Dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal Distrust, Interceptive Awareness, and Maturity Fears. We used the Japanese version of the Body Dissatisfaction subscale (Shimura et al., 1994) to assess participants' body dissatisfaction (1 = *disagree*; 5 = *agree*). The concurrent validity and internal consistency of this scale have been well established (Shimura et al., 2003). The measure also demonstrated good internal consistency in both our samples (high school girls: Cronbach's $\alpha = .77$; college women: Cronbach's $\alpha = .84$).

Demographics. Participants were also asked to self-report their age, height, and weight. We calculated BMI using these height and weight.

Results

Descriptive statistics

Analyses were conducted using IBM Statistical Package for Social Science (SPSS) version 24. Descriptive statistics are presented in Table 1. Participants' average BMI was 19.97 (SD=1.98), 22.7 percent of participants were underweight (BMI < 18.5), and 74.8 percent were of normal weight (18.5 < BMI < 25). Only 2.5 percent of participants were overweight (BMI > 25), and no participants were obese (BMI \geq 30). There were no significant differences among mean scores between high school girls and college women except for BMI. The mean BMI for college women was significantly higher than that of high school girls ($t=2.65$, $p < .01$). Participants' average BMI was nearly equal to Japanese women's average BMI (M=20.3, SD=2.2, among 15–19 years old women; M=20.9, SD=3.3, among 20–29 years old women; Ministry of Health, Labour and Welfare, 2018).

Correlational analyses

Correlational analyses indicated that among high school girls, there were significant relationships between fat talk,

Table 2. Correlations among variables for high school girls and college women.

	1	2	3	4
1. Sensitivity to rejection	–	.21**	.23**	.09
2. Thin-ideal internalization	.17*	–	.52***	.42***
3. Fat talk engagement	.10	.53***	–	.56***
4. Body dissatisfaction	.10	.35***	.47***	–

Upper right cells show correlations among high school girls and lower left cells show correlations among college women.

* $p < .05$; ** $p < .01$; *** $p < .001$.

thin-ideal internalization, and sensitivity to rejection. Among college women, thin-ideal internalization was significantly correlated with fat talk, but not sensitivity to rejection (Table 2).

Path analyses

We performed path analyses to test the study model examining the associations between sensitivity to rejection, thin-ideal internalization, and fat talk. Two separate path analyses were performed for high school girls and college women (Figure 1). The model for high school girls fits the data well, $\chi^2(1)=1.097$, $p = .29$, root mean square error of approximation (RMSEA)=.021, goodness of fit index (GFI)=.997, adjusted goodness of fit index (AGFI)=.974. Consistent with our hypothesis, thin-ideal internalization and sensitivity to rejection significantly predicted fat talk engagement, which, in turn, predicted body dissatisfaction. The model for college women also demonstrated good fit to the data, $\chi^2(1)=0.408$, $p = .52$, RMSEA=.000, GFI=.999, AGFI=.991. However, only thin-ideal internalization significantly predicted engagement in fat talk, and the path from sensitivity to rejection to fat talk engagement was not significant ($p = .79$).

Discussion

We investigated relationships among fat talk, body dissatisfaction, thin-ideal internalization, and sensitivity to rejection among high school girls and college women in Japan. Two major results were obtained. First, the role of

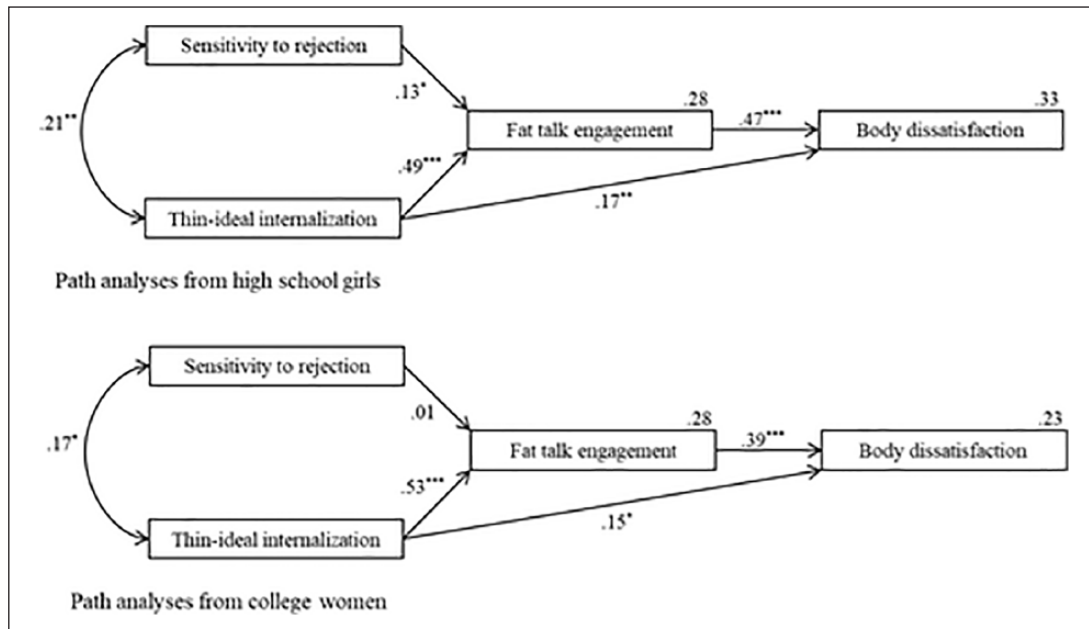


Figure 1. Path analyses examining mediating effect of fat talk between sensitivity to rejection, thin-ideal internalization, and body dissatisfaction for high school girls and college women.

* $p < .05$; ** $p < .01$; *** $p < .001$.

sensitivity to rejection in fat talk differed based on the developmental period. Consistent with our hypotheses, whereas high school girls' engagement in fat talk was predicted by their sensitivity to rejection and perceived pressure to be thin, college women's engagement in fat talk was not significantly predicted by sensitivity to rejection. Second, the mediating effect of fat talk on body dissatisfaction was larger than the direct effect of thin-ideal internalization on body dissatisfaction.

It was not surprising that thin-ideal internalization predicted participants' fat talk. Furthermore, thin-ideal internalization predicted body dissatisfaction directly and indirectly through fat talk engagement for both age groups. These findings are consistent with previous studies that indicated that fat talk is embedded within sociocultural contexts that idealize women's thinness (Martz et al., 2009; Nichter, 2000). As already mentioned, a number of studies investigated the influence of fat talk on body dissatisfaction (Jones et al., 2014; Sharpe et al., 2013). The results of this study supported these findings.

As expected, sensitivity to rejection predicted fat talk for high school girls but not for college women. This difference between high school girls and college women suggests developmental changes in peer relationships from early to late adolescence. We theorized that this might be due to the fact that high school girls are more likely to engage in fat talk than college women because of their fear of being left out by their peers. In conjunction with previous findings indicating that girls' friendships change over time (Matsumoto, 2016; Sugiura, 2000), it seems that our results reflect developmental changes in friendship. Our

findings also support Nichter and Vuckovic's (1994) claim that fat talk functions to facilitate interpersonal relationships. Therefore, when discussing fat talk among adolescent girls, the nature of friendship and social skills should be considered.

Limitations of the study must be noted. First, because this was a cross-sectional study, causal links between sensitivity to rejection, fat talk, and body dissatisfaction need to be interpreted with caution. Whereas we postulated that fat talk is a predictor of body dissatisfaction, there are contrasting arguments on the predictive relationships between these two constructs. Some researchers maintain that fat talk predicts body dissatisfaction (Nichter, 2000; Salk and Engeln-Maddox, 2011), whereas others believe fat talk is a consequence of body dissatisfaction (Sharpe et al., 2013). Studies with experimental and longitudinal designs would add to obtaining more conclusive results regarding the directionality in this relationship. Future longitudinal studies would also extend findings about developmental changes over the course of adolescence. Second, data were collected around the Tokyo area. It is possible that our findings reflect only individuals residing in an urban area. The results could be different between women living in urban and rural areas. It is possible that girls in urban areas engage in fat talk frequently because of extensive exposure to media, such as advertisements. Third, data were collected by a self-report questionnaire. Self-reported frequency of fat talk might be affected recall bias. Future studies with real-time data collection would reveal the exact frequency of fat talk. Furthermore, this study's participants were only women. Recent literature has shown that young men are

also affected by interpersonal pressure-related body image (Shomaker and Furman, 2009). In addition, the low BMI of the study participants must be interpreted with caution. The results of this study would not be generalizable to overweight women. Whereas a few studies showed no correlations between BMI and fat talk (Arroyo and Harwood, 2012; Salk and Engeln-Maddox, 2011), it was reported that overweight women were more likely to engage in fat talk than underweight and normal weight women (Engeln and Salk, 2016). Marks (2015) indicated the relationships between body dissatisfaction, negative affect, consumption of high-density foods, and obesity and proposed obesity prevention strategies that include devalorizing thin-ideal. Future research among women with various body sizes will extend the results of this study to a larger population.

This study provided an overall representation of fat talk in adolescent girls and young women in Japan. Our findings can be used to develop intervention programs that curtail women's fat talk engagement and weaken its effects on negative body image. Our results also suggest that intervention programs for adolescents should not only target body image but also include social-skills training to develop and maintain interpersonal skills. Adolescents may benefit from social-skills training that assists with maintaining healthy peer relationships, which would allow adolescent girls to become more resilient when encountering social rejection. In addition, our results indicated that college women did not engage in fat talk to avoid social rejection. However, there was no difference between the frequency of fat talk engagement among high school girls and college women. Thus, college women may engage in fat talk for other reasons. Future studies with various age groups may help us better understand why individuals engage in fat talk. Furthermore, future studies considering interpersonal relationships and cross-cultural studies would extend findings about fat talk and body image among collectivistic cultures.

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