ORIGINAL ARTICLE



Interactive role of weight status and fat talk on body dissatisfaction: an observation of women friends

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Abstract

Purpose The current study examined the interactive role of weight status and fat talk on body dissatisfaction among women friends.

Method Sixty pairs of women friends completed a measure of body dissatisfaction and engaged in an observed fat talk interaction with their friend.

Results Women's weight status was related to their own, but not their friend's, body dissatisfaction. Observed fat talk was significantly related to individuals' own and their friend's body dissatisfaction. A significant interaction effect showed that the association between fat talk and body dissatisfaction was minimal for women with higher weight status. In contrast, fat talk was associated with more body dissatisfaction for women with lower weight status.

Conclusion These findings suggest the importance of examining the conjoint effect of personal (e.g., weight status) and contextual (e.g., fat talk) factors on body image issues.

Level of evidence V, cross-sectional descriptive study.

Keywords Weight · Body dissatisfaction · Fat talk · Friends · Actor-partner interdependence model · Moderation

Introduction

Fat talk is a form of derogatory conversation about weight and body shape that is common among women and adolescent girls [1–4]. Although fat talk is a norm for many women [3] that serves multiple functions (e.g., eliciting social validation and providing an outlet for negative emotions), cross-sectional and longitudinal self-report studies have consistently shown that engagement in fat talk is associated with body dissatisfaction, eating disorder symptoms, and unhealthy eating behaviors (e.g., consuming high fat food, less mindful eating) [5–7]. Similarly, experimental studies have established the causal impact of fat talk on body dissatisfaction [8, 9]. Thus, investigating the interpersonal dynamic of fat talk is important for a better understanding of body dissatisfaction and eating disorders.

Fat talk in women relationships

Although it has been consistently demonstrated that fat talk and body image issues (e.g., body dissatisfaction, eating disorder symptoms) are directly related [10], some researchers have proposed that fat talk can be conceptualized as a social support interaction that may be emotionally beneficial [11–14]. Fat talk can be viewed as individuals' attempts to seek reassurance that they are not fat and unattractive, hoping to solicit their listeners' support and reciprocated selfdisparaging statements [2]. It appears that engagement in fat talk might function as an outlet for women's negative emotions stemming from negative body image. Supporting this proposition, a recent study showed that female same-sex couples who were offered an opportunity to talk with their partners reported improved body satisfaction in a lab session [13]. Assuming fat talk as a social support interaction, evidence that shows linkages between fat talk and increased negative body image outcomes [4, 5] seems to be paradoxical, given that general disclosure of negative emotions is related better mental health [15].



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Person × context perspective

A Person x context approach to mental health [16, 17] can be useful for detangling the paradoxical associations between fat talk and body image dissatisfaction. According to this perspective, body image outcomes are dependent on the interaction between individual characteristics and social context [17]. Generalizing this argument to the current study, it is possible that the association between fat talk (social context) and body dissatisfaction may be different for women with different weight statuses (personal factors). Perhaps, for women with higher weight statuses (e.g., obese), disclosing weight concerns and soliciting reassurance from friends are functionally important for reducing body dissatisfaction. In contrast, when women with lower weight status engage in fat talk, their selfdisparaging statements are incongruent with their selfconcept. The incongruence may elicit an unpleasant psychological state, which may motivate women to alter their self-concept to be more in line with their statements (e.g., "I am so fat"), suggesting that the negative effect of fat talk may be more relevant for women of lower weight status.

There are at least two studies that supported the Person x context perspective. The most relevant past work was by Tan and Chow [12] that examined the link between women's engagement in fat talk with a close friend, weight status, and depressive symptoms. They found that the association between weight status and depressive symptoms was moderated by fat talk. Specifically, it was found that being heavier was associated with more depressive symptoms in women, but such an association was reduced by engagement in more fat talk within a friendship. Similarly, in a study on male friends, it was found that engagement in fat talk was a protective factor for heavier individuals by reducing body dissatisfaction [11]. The potential therapeutic effects of fat talk among friends have also been demonstrated in another study with women friends in which perceived acceptance from a friend during fat talk (e.g., "When I mention something about my body/weight, my friend typically shows she understands how I feel about my weight") minimized individuals' tendency to binge and purge, especially in the presence of high fat talk [18]. These findings, however, will require further investigations and replications, given the consistent findings of fat talk and body image dissatisfaction [10].

Partner-body weight and fat talk

According to the partner-comparison model [19], women may experience higher levels of body dissatisfaction when their close others (e.g., friend, romantic partner) have lower body weights (e.g., Body Mass Index, BMI). Due to a social comparison process, this association is especially strong for women higher in BMI. Although the partnercomparison model suggests a negative link between women's body dissatisfaction and their partners' body weights, fat talk interaction between the members may moderate such an association [12]. Specifically, previous research on women friendships found that higher partner BMIs were related to individuals' more depressive symptoms [12]. There are at least two possible explanations for this finding. First, it was speculated that women with higher BMI may have more body concerns and worries, and this negative affect may be transmitted to their friend through fat talk [12]. Second, thin idealization of one friend may be transmitted to another friend, pressuring her to feel dissatisfied or distressed with her own weight through fat talk [12, 20]. In other words, individuals with higher BMI may transfer their thin idealization to their friends through their engagement in fat talk.

The current study

The main goal of the current study was to examine the association between fat talk and body dissatisfaction, moderated by women's weight status. Almost all fat talk studies have relied on a self-report method that is sensitive to reporter biases. A behavioral observation method for capturing fat talk between friends, therefore, will be needed to address the issues related to self-report biases. By observing women friends' conversation as opposed to relying on self-report data, it allows us to capture participants' spontaneous utterances during an interaction. The observed data in turn could allow us to extract information about fat talk interactions among women friends that may be difficult to assess through self-report. Furthermore, considering that some emerging evidence suggests that individuals' weight status matters when examining the association of fat talk and body dissatisfaction [11, 12], we hypothesized that the association between fat talk and body dissatisfaction would be moderated by weight status. Specifically, fat talk would be associated with more body dissatisfaction for women with lower weight status. In contrast, fat talk would be associated with less body dissatisfaction for women with higher weight status. Furthermore, this study proposed that individuals' weight might impact their friend's body dissatisfaction due to transmission of negative emotion or the "contagion effect" [21]. Thus, we hypothesized that if the dyads engage in higher fat talk, the association between individuals' BMI and their friend's body dissatisfaction may be further aggravated.



Methods

Procedure and participants

College women were recruited from a medium-sized university (enrollment of around 14,000 students) located in Wisconsin, USA. For the purpose of this study, interested individuals were instructed to bring a close woman friend to participate together. Friend dyads were scheduled for a laboratory session and were informed that they would complete a series of questionnaires and a video-recorded fat talk interaction. Upon consent, friend dyads completed a series of self-report questionnaires, including the variables reported in this study. Then, friend dyads were asked to participate in a video-recorded fat talk interaction. A trained research assistant explained to the friend dyads that the discussion would revolve around body image related issues (e.g., weight/shape concerns, diet/exercise plans). Specifically, each person would take a turn to discuss her own body image issues concerns with the other friend for 6 min. One of the members was randomly selected to begin the discussion session, while the second friend was asked to respond to the discloser spontaneously in order to simulate natural interactions that would occur outside of the lab. After the first 6 min, another 6 min were dedicated to the discussion of the second friend's body image concerns. Upon the completion of the fat talk interaction task, the participants answered a short survey assessing their post-interaction satisfaction. The study protocol was approved by the institutional review board at the University of Wisconsin-Oshkosh. Participants received credits to partially fulfill their psychology course requirements.

The final sample included 60 pairs of women friends. The current sample primarily consisted of young adult women ($M_{\rm age} = 19.95$ years, SD = 1.53) and their duration of friendships was substantial ($M_{\rm duration} = 2.76$ years, SD = 3.00). Participants described themselves as Caucasian (87.5%), African American (1.67%), Asian (5.00%), Hispanic (0.83%), and Other (5%).

Measures

Body dissatisfaction

The participants completed the nine-item body dissatisfaction subscale of the Multidimensional Eating Disorder Inventory (MEDI) [22]. This subscale captured how much participants were dissatisfied about various body parts or body shape. One example item reads, "I think that my stomach is too big". Participants rated the items on a scale ranging from 1 (never) to 6 (always). The items were

averaged to form a body dissatisfaction variable. For the current study, the reliability of the body dissatisfaction subscale was satisfactory, with Cronbach's $\alpha = 0.86$.

Body mass index (BMI)

Participants reported their weight in pounds and height in inches for calculating their body mass index (BMI). BMI was calculated by dividing weight in pounds by squared height in inches and multiplied by 703. For the current study, the average BMI was 24.33 (SD=4.90) and ranged from 17.11 to 44.62. Previous research has found that self-report weight and height were accurate [23].

Observed fat talk

The video-recorded behavioral interaction between friends was coded based on a manual developed by the first author (an expert in body image research) along with a group of lab members. We reviewed the qualitative research on adolescent girls in order to identify the common thematic behaviors that occur during fat talk [1, 14, 24]. These conversations may include direct negative evaluation of appearance or weight, specific plans or strategies for body modifications, and the importance of sociocultural values of thinness and controlling one's body [1, 24]. Based on the past qualitative research, we developed a coding manual in which four major themes of conversations were targeted. The themes are organized in the following hierarchical order: (1) negative self-evaluation (e.g., "I feel fat"), (2) dieting, exercises, or other related plans (e.g., "I need watch my diet more closely"), (3) importance of appearance (e.g., "It's important for me to look good"), and (4) none of the above.

The coders viewed and coded each 12-min fat talk video on lab computers in 10-s intervals (within each friend dyad, each individual had 36 intervals). For each 10-s interval, coders were instructed to assign a "1" to only one major theme and assign "0s" to the rest of the themes. In instances when more than one theme occurs in the same interval, coders would go with the higher order theme, regardless of the proportion of time-spent in the themes. For example, one may say, "I really don't like how my abs look now; I should do more sit-ups". In this example, negative self-evaluation (theme 1) and dieting plan (theme 2) are embedded in the same sentence and interval. When this occurs, the coders would prioritize the higher order theme code; in this case, a "1" for negative self-evaluation. Similar logics apply to the subsequent themes (e.g., theme 2 > 3 > 4).

It is worth mentioning that the hierarchical approach was designed to ensure that negative self-evaluation conversations would be prioritized as the key behaviors. The limitation of this procedure, however, was that it did not allow multiple themes to coexist and forced the scores of different



themes to be negatively correlated. This unintentional design shortcoming would not permit the inclusion of all themes to be analyzed simultaneously due to the inflated negative correlations among them. Because negative self-evaluation disclosure (fat talk) was the thematic behavior with the highest priority to be coded, it was the only variable included in this study.

Coders went through training sessions to achieve desirable reliability (> 0.70) in a set of predetermined training videos. After achieving desirable reliability, the coders independently coded 82% of remaining videos and double-coded 18% of videos for reliability check. The resulting interrater reliabilities (Cohen's Kappas) for negative self-evaluation was 0.71. Upon completion of the coding sessions, the coders met to resolve the inconsistencies in the double-coded videos. For each friend, the interval codes were averaged and collapsed to form a fat talk variable. Considering that fat talk was dyadic in nature and moderately correlated between two friends (r=0.33, p<0.05), the scores provided by each member were averaged to form a dyadic level fat talk variable in which a higher score represents a greater amount of observed fat talk in a particular dyad.

Plan of analyses

According to Kenny, Kashy, and Cook [25], same-sex friends are considered "indistinguishable" dyads because "Friend A" and "Friend B" play equal roles in the relationship. In analyses of indistinguishable dyads, the members ("Friend A" and "Friend B") would have identical means, standard deviations, and correlation matrices. More

information about analyzing indistinguishable dyads can be found in Kenny et al. [25].

The main hypotheses were examined using the actor-partner interdependence model (APIM) [25]. The APIM allows the examination of whether an outcome in a relationship is a function of the target person's personal characteristics (actor effect) as well as the partner's characteristics (partner effect). For instance, an individual's body dissatisfaction could be a function of her own BMI (actor) and her friend's BMI (partner). Whereas a typical APIM would involve one predictor and one outcome variable from each partner, this study proposed a model by including fat talk as the dyadic predictor. Also, the interaction effects between fat talk and actor-BMI as well as partner-BMI were included. Figure 1 depicts a generic actor-partner interdependence moderation model that guided this study. It is important to note that when estimating the APIM with indistinguishable dyads, the actor effects, partner effects, and interaction effects would be identical for both members.

The APIM was specified with multilevel modeling implemented by R's nlme package [26, 27]. The predictors were entered with a hierarchical approach. First, the actor and partner effects of BMI, along with observed fat talk, were entered in the model. Second, the interaction terms of actor BMI \times fat talk and partner BMI \times fat talk were entered in the model. To facilitate interpretation of results, all predictors were standardized to the grand mean. An interaction term was formed based on the standardized predictors [28]. Pseudo- R^2 was also calculated to indicate the approximate amount of variance explained by the predictors at each step. Significance of the pseudo- R^2 was tested with a Chi square difference test.

Fig. 1 Graphical representation of the actor–partner interdependence model. It is important to note that when estimating the APIM with indistinguishable dyads, the actor effects, partner effects, and interaction effects would be identical for both members. As depicted, the paths with the same numerical values were identical for both members (e.g., A1 = B1, A2 = B2). A friend A, B friend B

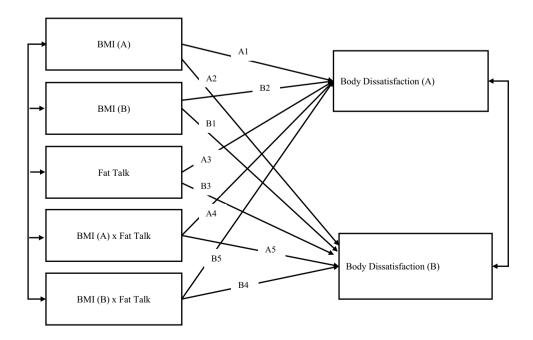




Table 1 Means, standard deviations, correlations between key study variables

	1	2	3	4	5
1. BMI-A	_		,		
2. BMI-B	0.33*	_			
3. Observed fat talk	0.10	0.10	_		
5. Body dissatisfaction-A	0.43*	0.15	0.31*	_	
6. Body dissatisfaction-B	0.15	0.43*	0.31*	0.16	_
Mean	24.33	24.33	0.24	3.14	3.14
SD	4.90	4.90	0.10	0.93	0.93
Range	17.11-44.62	17.11-44.62	0.06 - 0.58	1.11-5.33	1.11-5.33

Coefficients were computed based on double-entry data. Means, standard deviations, and correlations for study variables were equal for both friends. Due to a small amount of missing data in the observed fat talk (3 dyads), the statistics and significance tests were estimated with Maximum Likelihood (Allison 2001). Significance tests were based on N=60

A Friend A, B Friend B

 Table 2
 Coefficients of the actor–partner interdependence model predicting body dissatisfaction

	Step 1: B (SE)	Step 2: B (SE)
Intercept	3.13	3.14
BMI (A)	0.36 (0.08)*	0.38 (0.07)*
BMI (B)	0.00 (0.08)	0.02 (0.07)
Observed fat talk	0.25 (0.09)*	0.22 (0.08)*
BMI (A) * observed fat talk	_	-0.34 (0.09)*
BMI (B) * observed fat talk	_	0.17 (0.09)
Δ pseudo- R^2	0.25	0.12
$\Delta \chi^2 (df)$	30.70 (3)*	16.12 (2)*

A Friend A, B Friend B, B unstandardized regression weights, SE standard errors

Results

Table 1 presents the means, standard deviations, and correlations among the study variables. An APIM based on the theoretical model (Fig. 1) was estimated and the findings are presented in Table 2. In Step 1, the actor effect showed that individuals' BMI was significantly related to body dissatisfaction. Partner effect showed that individuals' BMI was not significantly related to their friend's body dissatisfaction. A significant effect was found between observed fat talk and body dissatisfaction.

In Step 2, we found that the interaction effect of BMI and fat talk was significant in predicting individuals' body dissatisfaction. In order to display this interaction, Fig. 2 presents a graphical representation derived by calculating the simple slopes [28], corresponding to one standard deviation above and below the mean for fat talk, crossing with the three weight statuses of normal (BMI = 18.5),

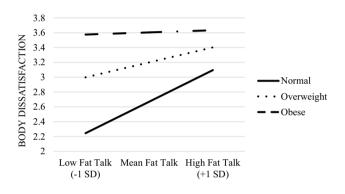


Fig. 2 Interactive effect of individuals' BMI and fat talk on their body dissatisfaction. The different lines represent the association between fat talk and body dissatisfaction, varying by normal (BMI=18.5), overweight (BMI=25), and obese (BMI=30) weight statuses

overweight (BMI = 25), and obese (BMI = 30) weight statuses. Simple slopes analysis showed that the effect of dyadic fat talk on body dissatisfaction was not significant for women who were obese (b = 0.03, SE = 0.17, p = 0.86). In contrast, the effect of dyadic fat talk on body dissatisfaction was significant for women who were normal weight (b = 0.43, SE = 0.14, p < 0.01) and overweight (b = 0.20, SE = 0.09, p = 0.02).

Discussion

Research has consistently supported a link between fat talk and body image concerns, such as body dissatisfaction [10]. However, some literature suggests that fat talk may be associated with negative outcomes differently depending on individuals' weight statuses [11, 12]. To date, all research has studied fat talk through self-report only. This study is the first to measure fat talk using behavioral observation within women friendships. Hence, the primary contribution of



^{*}p < .05

^{*}p < .05

this study is the use of behavioral observation to assess the actual pattern of fat talk interaction between close friends, which allows us to capture how women friend dyads actually engage in fat talk to a greater degree than self-report measures.

When the main effects are examined (with no interactions), we found that the actor effect of BMI on body dissatisfaction was significant. That is, women with a higher reported BMI had higher levels of body dissatisfaction than women with a lower reported BMI, suggesting that one's own actual weight is an important predictor of body image concerns. This is consistent with prior work that shows that individuals with higher weight tend to experience more body dissatisfaction [29, 30]. As compared with thinner women, overweight and obese women appear at greater risk for body image concerns.

Consistent with past research [11, 12], the APIM analysis showed that there was an interaction between dyadic fat talk and individuals' BMI on their body dissatisfaction. Engagement in fat talk appears to impact women of various weight statuses differently. Specifically, for normal weight and overweight women, high participation in negative body talk with a friend was associated with higher levels of body dissatisfaction. This was not the case for obese women; these individuals were not significantly negatively impacted by engagement in fat talk. Although past research in general found that engagement in fat talk is associated with more body image issues [10], the current study revealed the complexity of the associations between negative body-related disclosure with a close friend and body image issues.

For women of lower body weight (non-obese women), high engagement fat talk was related to higher levels of body dissatisfaction. One explanation for why non-obese women experience negative outcomes in association with fat talk may be that engaging in such behavior causes cognitive dissonance. This theory suggests that speaking or acting in a way that is not aligned with one's view of themselves results in psychological discomfort, or dissonance [10]. In order to relieve this discomfort, individuals may adjust their attitudes to match their behaviors (e.g., a non-obese women may experience more body image concerns after discussing with her friend how she is dissatisfied with her body). Thus, if women of non-obese weight status have low levels of body image concern, engagement in fat talk may create a sense of cognitive dissonance. This might motivate them to alter their self-concept to reduce discomfort, essentially bringing down their body image to match their speech.

Given that fat talk is an interpersonal interaction that directs women's attention to their own body shape and size [10], as well as the strong association between BMI and body dissatisfaction [29], one may argue that those with higher BMI would suffer from more body dissatisfaction as a result of engaging in fat talk. Although this argument seems to be plausible, it

is not supported by the current study, as well as some other studies on dyadic fat talk [11]. Instead, the effect of fat talk seems to be rather paradoxical for obese women. The current study suggests that fat talk has little effect on body dissatisfaction for women with obese weight status. That is, the current study suggests that obese women do not appear to experience increased body dissatisfaction with higher engagement in fat talk. One possible explanation is that fat talk is a socially appropriate way in which women can express distress about their bodies [14] and women tend to believe that speaking negatively about their bodies relieves stress [4]. Thus, fat talk could serve as an important source of social support for heavier women through "venting" to a friend. The social support and reassurance received from friends may have provided temporary relief to women of a higher weight status, rather than exacerbating their concerns. Also, fat talk may increase relational closeness between friends [31]; having close social bonds could also offset the rather negative impacts of fat talk on body dissatisfaction for women with higher weight status. The complex interactive associations among BMI, fat talk, and body image outcomes, therefore, deserve further research attention. It is also important to note that the relationship between obesity, fat talk, and body image outcomes could change in different cultural contexts. For example, research suggests that African American women have a larger ideal body size and a greater level of acceptance of higher weight status than other ethnic groups in Western society [32]. As the current sample was primarily Caucasian, future research should consider studying fat talk and obesity in more diverse populations.

Regarding partner effects, the current study did not find a significant partner effect of BMI on body dissatisfaction. Similarly, there was no significant interaction effect of partner BMI and fat talk. In this study, the level of body dissatisfaction was not influenced by their friend's weight, regardless of the amount of fat talk they engaged in as a dyad. This contradicts past research which found that listening to fat talk was most detrimental coming from a thin individual [33]. Corning et al. [33] utilized an experimental design in which participants looked at photos of women with varied weight statuses and associated fat talk statements rather than addressing fat talk within an actual relationship. The current study, however, utilized an observational method that bears better external validity. More research should be conducted looking at differences in the associations of fat talk with friends, acquaintances, and strangers with more ecologically valid designs.

Limitations and future directions

Through the use of dyadic and observational data, the current study makes an important contribution to the literature. However, there are several possible limitations to this



research. It is important to point out that the current study is cross-sectional and correlational in nature. Although our analyses treated BMI and fat talk as predictors of body dissatisfaction, the current study precluded us from drawing causal linkages among the variables. For instance, it is certainly possible that women who were dissatisfied with their body are more motivated to engage in fat talk. Experimental research has demonstrated that engagement in fat talk has a causal effect on state body image dissatisfaction [8]. To our knowledge, however, no existing experimental research provide evidence to support the directional influence from body dissatisfaction to fat talk, possibly due to the difficulties in manipulating negative body image. In order to establish the temporal associations among fat talk, body dissatisfaction, and even BMI, longitudinal method should be employed.

The current coding system is primarily concerned with fat talk revolving around negative self-evaluation, which failed to capture healthier/feminist responses (i.e., actively challenge body-disparaging statements). A recent study suggests that feminist responses to fat talk disclosure in a dyadic interaction might be a powerful factor that counters the negative impacts of fat talk on negative body image [34]. Thus, the occurrence of these feminist messages during the interaction might be the mechanism that "reduces" the negative impact of being high in BMI on body dissatisfaction. Furthermore, although women with negative body image may hope to receive positive feedback from friends that enhances their view of appearance, supportive messages from friends that invalidate their negative self-view may be less verifying. Indeed, studies showed that women who received feedback that verify their appearance concerns tend to find that feedback to be more authentic and verifying [35]. The current coding system, however, failed to capture the positive versus negative responses during the fat talk interaction. Indeed, previous findings suggest that positive appearance conversation (e.g., "I feel good with how I look") may also interact with weight status to predict body image outcomes. However, the impact appears opposite to that of fat talk, with positive appearance conversation as a protective factor for thin women and a risk factor for overweight women [36]. These issues can be better addressed with a more comprehensive coding manual in future research.

The current study utilized a sample of college women who were relatively homogenous in demographic background (e.g., age, ethnicity). The homogenous college sample has limited the external validity of the current study's findings. For instance, it was found that fat talk decreases with age [37]; it is possible that women's age, in addition to BMI, can be another important person-level characteristic that moderates the effect of fat talk on body dissatisfaction. Therefore, it is important for future research to replicate the current study with a more diverse sample, or consider other

demographic variables (e.g., ethnicity, SES) as potential moderators.

Conclusion

The current findings may have important implications for clinical interventions. In some past research, fat talk has been considered overwhelmingly negative for all women [10]. However, this study suggests that the association between fat talk and body dissatisfaction varied by individuals' weight status. For women with lower weight status, a high level of discussion around shape and weight concerns is associated with body dissatisfaction. In contrast, for women with higher weight status, discussion around shape and weight concerns is not associated with body dissatisfaction. These findings highlight the importance of considering the interactive role of person and contextual factors when explaining body image disturbances. Therefore, clinicians should approach the issue of body image issues and fat talk individually, considering the possible interaction between weight status and engagement in body talk on clinical outcomes. For instance, interventions that aim to reduce fat talk among individuals with lower weight statuses can be helpful for protecting their body image and self-esteem [38].

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 the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

Appendix

Fat talk conversation coding manual

General introduction

The purpose of this coding manual is to capture the conversations between two partners (e.g., couples, friends) that revolve around their appearances. This coding manual is designed to capture a person's disclosures of appearance or body-related issues. Specifically, the dyads are asked to participate in a video-recorded discussion task that is designed to elicit body-related conversation. They will be encouraged to discuss various topics related to their weight



or appearance concerns, including (1) whether they think it is important to have a thin-looking body, (2) whether they feel pressure to be thin or their body dissatisfaction, or (3) their approaches and strategies to stay in shape, as well as the challenges associated with staying fit or thin. The participants will take turns disclosing their thoughts, with each member taking 6 min; the total discussion session will last 12 min.

Because each person has 6 min to disclose his/her thoughts and feelings, the coding should start at 0:00 and stop at 6:00. The total 6 min are then divided by intervals of 10 s. In other words, there are 6 intervals for each minute, and with a total of 36 intervals per participant (72 intervals per dyad). Please refer to a coding sheet for the distribution of intervals.

There are 4 major themes of conversations targeted. The themes are organized in a hierarchical structure: (1) negative self-evaluation, (2) dieting, exercises, or other related plans, (3) importance of appearance, and (4) none of the above. Each theme is described in detail below. For each 10-s

interval, assign 1 to ONLY ONE major theme and assign 0 to the rest of the items for that ten second interval. Stop the video every 10 s and only code according to what is in those 10 s. Although some videos may go over 6 min, all coding should still stop at 6:00. The remaining interactions can be ignored. If the interactions are shorter than 6 min, code the remaining time with the code "none of the above".

When more than one theme occurs in the same interval, always go with the highest order theme, regardless of the proportion of time-spent in the themes. For example, one may say, "I really don't like how my abs look now; I should do more sit-ups". In this example, negative self-evaluation (theme 1) and dieting plan (theme 2) are embedded in the same sentence. When this occurs, always prioritize the higher order theme; in this case, negative self-evaluation. Similar logics apply to the subsequent themes (e.g., theme 2>3>4). For another example, a person may talk about how important it is to look good during a job interview (theme 3) for 3 s, and the partner responses for the remaining 7 s (theme 4). A code for theme 3 should be assigned.

Themes and descriptions

Negative self-evaluation

This cluster of behaviors may include any disclosures of body or appearance dissatisfaction, either through direct disclosure (e.g., I don't like how I look), comparison to others (e.g., I love the way Emily looks), wishes (e.g., I really wish that I've got a flat stomach), or *fear* (e.g., I worry that I will become fat)

Any negative personal experiences due to appearance such as being rejected or discriminated should belong to this cluster. For instance, one may say, "I hate that people judge me because I'm bigger"

It is important to note that participants may mention some unexpected change in appearance due to life styles (e.g., on birth control, pregnant). Any unintended changes in body or appearance due to uncontrollable events may be coded in this cluster

Participants may evaluate themselves *positively*, such a behavior should NOT be coded as negative self-evaluation

Dieting, exercises, or other related plans

This cluster of behaviors may include any disclosures about previous plans, current behaviors, or making future plans to improve body image or appearance, including exercise, diet, and medical approaches. It may also include general plan for changing life style (e.g., sleep better) as well

It is important to note that this cluster may include any past attempts that have failed (e.g., I tried to exercise more but I am just too lazy) or specific instances in which may impact the body image (e.g., I should not have eaten so much last Thanksgiving)

Also, this cluster may include disclosures about how successful the participants have been at improving their appearance (e.g., I have been on X diet plan, and it really works for me)

As mentioned earlier, beware that that participants' message may include both negative self-evaluation and dieting, exercises, or other related plans. For example, one may say, "I really don't like how my abs look now; I should do more sit-ups." When this occur, always prioritize the higher order cluster

Examples

- "I love the way Emily's legs look, I wish mine were that long"
- "I wish I could eat as much as Bailey does and not gain a pound"
- "I'm scared of getting as big as Rodney."
- "I've been gaining weight lately and I really don't like it"
- "My legs are too big and jiggly"
- "I want to get more toned"
- "I want to lose weight"
- "I weigh so much"
- "I don't even want to say how much I weigh"
- "I could lose 30 pounds"
- "Birth control made me gain weight"
- "I gained weight when I came to college"
- "I want to go to the gym as much as Rachel does"
- "I never have time to go to the gym because of work and school"
- "For a while I was going to the gym 3 times a week but classes got too stressful so I stopped"
- "I tried out a few fitness classes but they really weren't fun"
- "I'm going to start eating healthier after midterms end!"



Themes and descriptions

Importance of appearance

This cluster of behaviors may include any disclosures about the importance (or unimportance) of appearance. Participants may devalue the importance of body type (e.g., "I don't think being stick thin is that important") or endorse the importance of certain body type (e.g., "Looking fit is very important.")

Any message about social norms expecting people to look fit or good should be coded as this category (e.g., I think it is hard not to think about our body because of the media)

As mentioned earlier, beware that that participants' messages may include more than one theme. For example, one may say, "Our wedding is coming up, I need to hit to the gym more." In this example, the message includes both plans and importance. When this occur, always prioritize the higher order, which is theme 2 (plans) in this

None of the above

This cluster of behaviors may include any disclosure that could not be classified as the themes above

For instance, participants may evaluate themselves *positively*. Such a behavior should NOT be coded as negative self-evaluation. Instead, it should be assigned a "none of the above" code

Any off-topic conversations should belong to this cluster (e.g., what's the interaction about again?)

Also, some messages may be related to body appearance or weight but without a clear context (e.g., I lost 20 pounds), they should be coded as "none of the above"

If the partner (rather than the focus participant) is talking for the WHOLE interval, a "none of the above" code should be assigned as well

Examples

- "I think everyone should worry about their appearance"
- "It shouldn't matter how a person looks"

It is so important to take care of your own body shape when you are younger

I really don't care much about how I look

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