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Fat Talk in College Women: A Response Styles Perspective

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Abstract

This study placed the phenomenon of college women's fat talk within response styles theory. We predicted that with increasing trait body dissatisfaction there would be an increase in rumination leading to a greater frequency of fat talk. We also predicted that neuroticism would moderate this mediation pathway, and that these effects would occur over and above body size. A survey was conducted on a convenience sample of 212 college women with a mean age of 22.04 years ($SD_{age} = 2.61$). A bootstrap analysis utilizing PROCESS software supported the predicted moderated-mediation model. Thus, those college women higher in both trait body dissatisfaction and neuroticism would experience greater rumination and engage more frequently in fat talk. Implications of applying a response styles perspective for future research and fat talk interventions are discussed.

Keywords

co-rumination, fat talk, neuroticism, rumination, trait body dissatisfaction

Fat talk refers to the self-disparaging commentary made to other people about one's own body weight, size, or shape (Nichter & Vuckovic, 1994). Such commentary has predominantly been documented in women and college women especially, where the phenomenon is positively related to drive for thinness, dietary restraint, and disordered eating behaviors (Arroyo & Harwood, 2012; Compeau & Ambwani, 2013; Ousley et al., 2008; Warren et al., 2012). It is thought that fat talk promotes the development and maintenance of eating pathology by increasing body dissatisfaction, which is a primary risk factor for eating pathology (Mills & Fuller-Tyszkiewicz, 2017; Sharpe et al., 2013; Stice & Shaw, 2002).

One explanation for women's engagement in fat talk is that it may be a consequence of initial high levels of trait body dissatisfaction (TBD; Arroyo & Harwood, 2012; Clarke et al., 2010; Mills & Fuller-Tyszkiewicz, 2017; Nichter & Vuckovic, 1994; Rudiger & Winstead, 2013; Salk & Engeln-Maddox, 2011). With this in mind, and given that there is a limited amount of literature offering explanations for women's self-disparaging conversations (Arroyo, 2014), we place fat talk within the response styles theory (RST) of rumination (Nolen-Hoeksema, 1991). By so doing, we first examine whether ruminative thinking about the body mediates the relationship between TBD and fat talk. Second, we examine whether neuroticism, an individual difference closely associated with rumination (Nolan et al., 1998; Roelofs et al., 2008), exacerbates the relationship between TBD and rumination,

and thereby increases the frequency of fat talk (see Figure 1). In testing this moderated mediation model, we hope to provide greater insight into developing interventions that target both the mechanism underpinning fat talk, as well as those most likely to engage in fat talk.

Rumination can be said to refer to a repetitive focus on one's current experience of negative affect, as well as its causes and consequences (Nolen-Hoeksema et al., 2008). According to RST, ruminative thought is a response to psychological distress (Nolen-Hoeksema et al., 2008). Thus, central to RST is that the trigger for ruminative thinking is negative affect. In support of this causal pathway researchers have found that people report that their rumination serves to help them understand and resolve the source of their distress (Papageorgiou & Wells, 2004). Seen in this way rumination can be said to be a form of emotion regulation which people believe functions to reduce the magnitude of negative emotion. Similarly, and in accordance with RST, we reason that

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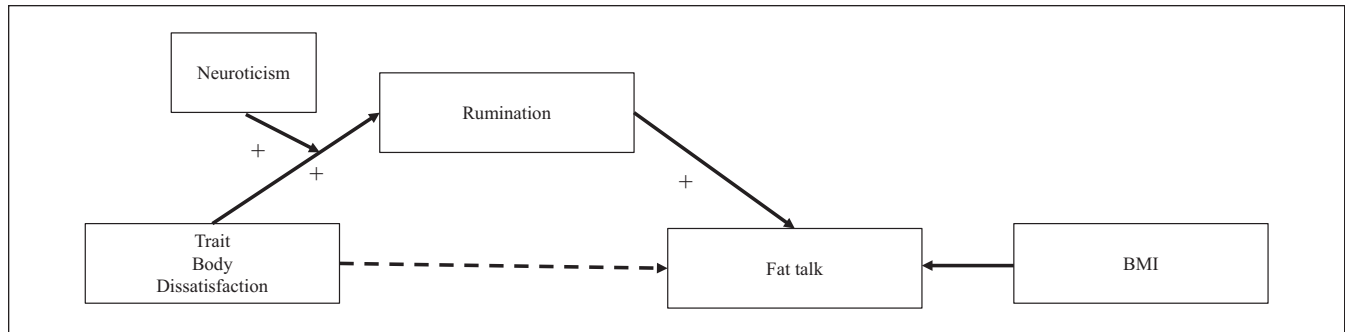


Figure 1. Proposed moderated mediation model; controlling for body mass index.

women engage in rumination in an attempt to cope with the experience of TBD. Indeed, we would expect that the greater the degree of TBD the more likely a woman is to engage in rumination as a coping mechanism, whereby they will more frequently think about their experience of TBD, as well as its causes and consequences. As a result, in this study we predict that with increasing TBD there will be a greater frequency of ruminative thinking about one's dispositional body image distress.

Importantly, rumination is not just conceptualized as a process that occurs at the level of the individual. In this regard, Rose (2002) broadened the concept of rumination to include a social manifestation, called co-rumination. Co-rumination is characterized by the excessive discussion of problems and symptoms (Jose et al., 2012; Nolen-Hoeksema, 2012). Recently, Jose et al. (2012) found that the internal process of ruminative thinking predicted co-ruminative discussions with friends. These authors reasoned that this relationship reflected ruminative individuals' increasing tendency to seek out other's opinions on their internal issues and concerns. Building on this reasoning we propose that those women who ruminate on their TBD have a greater likelihood to engage in co-ruminative discussions about their concerns with regard to the appearance of their body. While not placing fat talk within as RST framework, it is important to note that support for this proposal comes from recent research within the body image literature. For example, Shannon and Mills (2019) reported that fat talk can be initiated by thoughts of overeating specifically, as well as general concerns about one's body weight. Indeed, given the self-disparaging content and the dyadic nature of fat talk, some researchers already conceptualize fat talk as a body-specific form of co-rumination (Arroyo et al., 2017; Rudiger & Winstead, 2013).

While we expect that rumination about the body will mediate the relationship between TBD and fat talk, we also expect that this mediating pathway will be stronger for those women who are higher in neuroticism. Neuroticism is a relatively enduring personality trait that is characterized by a tendency to experience negative emotional states and sensitivity to stress (McCrae & Costa, 1987). According to Lahey (2009), neuroticism is a psychological trait of profound public health

significance because it is a robust correlate and predictor of many different mental and physical disorders (Widiger & Oltmanns, 2017). Within the body image domain, neuroticism is associated with increased body image disturbance and disordered eating (Allen & Walter, 2016; Cassin & von Ranson, 2005). One explanation for how neuroticism is associated with psychological disturbance is that neuroticism promotes a negative bias in terms of attention and memory (Derryberry & Reed, 1994). From the perspective RST, such a negativity bias appears to be cognitively manifested in an enhanced ruminative focus on distress (Nolan et al., 1998; Muris et al., 2005; Roberts et al., 1998). Such being the case, and within the context of increasing TBD, we predict that with increasing neuroticism there will be even greater ruminative focus on the causes and consequences of body dissatisfaction. As a result, this should in turn lead to an even greater interpersonal expression of rumination in the form of more frequent fat talk.

Finally, we also expect that the relationships exhibited in the predicted moderated mediation model to occur over and above the influence of body size (body mass index [BMI]). This expectation is consistent with a significant body of research that has found that women tend to engage in fat talk regardless of body size (Corning & Gondoli, 2012; MacNeil et al., 2017; Shannon & Mills, 2019; Tiggeman, 2011). We presume from this that the fat talk which ultimately arises from TBD is based on a subjective perception of being fat rather than actually objectively being fat (Salk & Engeln-Maddox, 2011).

Method

Participants

A total of 213 college women between 17 and 39 years of age participated in this study as part of a convenience sample. One participant was excluded from the analysis because she did not complete the questionnaire, leaving a total of 212 participants. All participants gave informed consent before participating in the study and no incentive for participation was provided.

Materials

Trait Body Dissatisfaction. The eight-item weight-subscale of the Body Esteem Scale (BES; Mendelson et al., 2001) was used to operationalize TBD. Examples of items are “I am preoccupied with trying to change my body weight” and “I really like what I weigh,” respectively. Items were rated on a 5-point Likert-type scale, ranging from 1 (*never*) to 5 (*always*). Since lower scores on the BES denote higher levels of TBD, we reversed the scores on the BES so that it reflected the direction of TBD: Higher scores on the BES denote higher TBD. The BES has been previously shown to be a reliable and valid measure in adolescents and adults (Mendelson et al., 2001). In this study the internal reliability was $\alpha = .92$.

Rumination. The rumination subscale from the Response Style Questionnaire (RSQ; Nolen-Hoeksema et al., 1993) was administered to assess the frequency with which participants engaged in a ruminative response style with regard to feeling negative or dissatisfied about their body weight, size, and shape. The 16-item subscale covers items that focus on symptoms, their causes and consequences, such as “Why do I always react this way.” In this study we adapted the RSQ to reflect rumination about body dissatisfaction by including the preamble: “Please indicate the frequency with which you thought or behaved in response to feeling negative or dissatisfied with your body weight, size and shape.” Items were rated on a 5-point Likert-type scale, ranging from (1) *never* to (5) *always*. Higher scores indicated greater frequency of engagement in ruminative response style in participants. The RSQ has previously been shown to demonstrate satisfactory internal reliability ($\alpha = .80$) and moderate to high retest stabilities (Just & Alloy, 1997). In this study the internal reliability was $\alpha = .87$.

Neuroticism. The neuroticism subscale from the Big Five Inventory (John & Srivastava, 1999) was used to operationalize neurotic personality characteristics. The subscale consisted of eight items, (e.g., “I see myself as someone who worries a lot”). Items are rated on 5-point Likert-type scale ranging from 1 (*disagree strongly*) to 5 (*agree strongly*). The scale has previously demonstrated good internal consistency ($\alpha = .83$) and adequate test-retest reliability (John & Srivastava, 1999). In this study, the internal reliability was $\alpha = .81$.

Fat Talk. The 14-item Fat Talk Questionnaire (FTQ; Royal et al., 2013) was used to capture the extent of women’s self-reported behavior in fat talk situations, by asking about the frequency of body-related complaints made to close female friends (e.g., “When I’m with a close female friend(s), I complain that my stomach is fat”). Participants indicated their responses on a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*always*). The FTQ has been deemed to yield reliable and valid scores for young women aged 18 to 32

years (Royal et al., 2013). In this study, the internal reliability was $\alpha = .91$.

Body Size. To calculate the BMI, participant’s approximate height and weight was assessed through self-report revealing a mean of 22.07 ($SD = 2.70$). Previous studies have shown a variation by 1% to 3.5% between actual height and weight and subjectively reported values (Bowman & DeLuca, 1992).

Procedure

The study was first approved by the ethics committee from the department of psychology. Female students were then approached in the university library as part of a convenience sample. Volunteers were then guided to a private area containing a desk and a chair in order to complete an informed consent and a questionnaire. The questionnaire contained demographic information (i.e., height, weight, and age), as well as measures of TBD, rumination, neuroticism, and frequency of fat talk. All completed questionnaires were deposited by the participants into a sealed container which was monitored by a research assistant.

Statistical Analysis

Following Hayes’s (2017) directives, we examined three models to test moderated mediation. The first model was a simple mediation model and corresponded to Model 4 in Hayes’s (2017) directives. This model evaluated whether TBD influenced fat talk through rumination. The second model was a moderator model and corresponded to Model 1 in Hayes (2017). This model evaluated whether neuroticism moderated the relationship between TBD and rumination. The third model was a first-stage moderated mediation model and corresponded to Model 7 of Hayes (2017) directives. This model evaluated whether the mediating effect of rumination from TBD to fat talk was moderated by neuroticism. Presence of moderated-mediation is tested through (a) the index of moderated mediation and (b) the estimates of the indirect effect on three levels of the moderator (i.e., the mean value, one standard deviation above and one below the mean). We estimated the models using the statistical software SPSS (Version 23) and the PROCESS extension (Version 3). The Process software uses a bootstrapping procedure using 5,000 samples to examine the predicted relationships (for further details on PROCESS, see Hayes, 2017). In all models BMI was included as a control variable.

Results

Descriptive and Correlation Analysis

Table 1 reports the correlations among the investigated variables as well as means and standard deviations.

Table 1. Pearson Correlations, Min, Max, Ranges, Means, and Standard Deviations of the Measured Variables.

Variables	1	2	3	4	5
1. BMI	—				
2. TBD	.496**	—			
3. RUM	.182**	.538**	—		
4. N	.073	.360**	.457**	—	
5. FTALK	.326**	.565**	.545**	.306**	—
<i>M</i>	22.00	21.58	33.91	23.83	27.82
<i>SD</i>	2.791	6.41	10.67	4.70	9.20
Minimum	16.42	8.00	16.00	13.00	13.00
Maximum	38.01	36.00	65.00	35.00	54.00
Range	21.58	28.00	49.00	22.00	41.00

Note. The unstandardized Pearson correlation coefficients are reported for each variable. BMI = body mass index; TBD = trait body dissatisfaction; RUM = rumination; N = neuroticism; FTALK = fat talk. ** $p < .01$.

Mediation Analysis

The overall mediation model was significant, $F(2, 209) = 44.63$; $p < .001$, with 29.85% of the variance explained. The path toward fat talk from rumination ($B = 0.30$; standard error [SE] = 0.05; 95% CI = [0.19, 0.41]) and TBD ($B = 0.47$; $SE = 0.10$; 95% CI = [0.26, 0.67]) were both significant. The path from TBD to rumination was also significant ($B = 0.98$; $SE = 0.11$; 95% CI = [0.77, 1.21]). Moreover, the indirect effect from TBD to fat talk through rumination was also significant ($B = 0.30$; $SE_{boot} = 0.06$; 95% CI = [0.18, 0.44]), providing supporting evidence for a mediation effect of rumination on the influence of TBD on fat talk. The direct effect of TBD on fat talk was significant ($B = 0.47$; $SE_{boot} = 0.10$; 95% CI = [0.26, 0.67]). No other path was significant. For this model we also computed the “proportion of mediation” according to Iacobucci et al. (2007). The proportion of mediation is the variance of fat talk explained by TBD and it reflects the ratio between the indirect and total effect. The proportion of mediation thus reflects the effect size of the mediation effect which amounted to 38.93%.

Moderation Analysis

The overall model was significant, $F(4, 207) = 32.81$; $p < .001$, with 38.77% of the variance explained. Only the path from the interaction between TBD and neuroticism to rumination was significant ($B = 0.04$; $SE = 0.19$; 95% CI = [0.005, 0.08]), and the conditional indirect effects showed that the relationship between TBD and rumination increased in magnitude from the low ($B = 0.49$; $SE = 0.16$; 95% CI = [0.16, 0.82]), moderate ($B = 0.72$; $SE = 0.12$; 95% CI = [0.48, 0.94]), and high ($B = 0.94$; $SE = 0.13$; 95% CI = [0.67, 1.19]) levels of neuroticism. No other path was significant. This evidence supports the presence of an interaction between TBD and neuroticism on rumination.

Moderated Mediation Analysis

Figure 2 displays the results of the first-stage moderated mediation model and illustrates the significant and nonsignificant pathways between the measured variables. The model predicting rumination was significant, $F(4, 207) = 32.81$; $p < .001$, with 38.77% of the variance explained. The model predicting fat talk was also significant, $F(3, 208) = 47.91$; $p < .001$, with 40.90% of the variance explained. Aggregating the two R^2 s into Schumacker and Lomax's (2004; see also Pedhazur, 1982) generalized squared multiple correlation yields an index of 64.03%, which reflects the percentage of variance explained by the two models. The path to fat talk from rumination ($B = 0.30$; $SE = 0.06$; 95% CI = [0.19, 0.41]) and TBD ($B = 0.47$; $SE = 0.1$; 95% CI = [0.26, 0.67]) were both significant. The interaction between neuroticism and TBD was significant ($B = 0.04$; $SE = 0.02$; 95% CI = [0.006, 0.08]). Moreover, the conditional indirect effects showed that the relationship between TBD and rumination increased in magnitude from low ($B = 0.15$; $SE_{boot} = 0.05$; 95% CI = [0.05, -0.27]), medium ($B = 0.21$; $SE_{boot} = 0.05$; 95% CI = [0.12, 0.34]), and high ($B = 0.28$; $SE_{boot} = 0.06$; 95% CI = [0.16, 0.42]) levels of neuroticism (see also Figure 3). No other path reached significance. Moderated mediation was also supported by Hayes's index of moderated mediation (Hayes, 2015), which was also significant ($B = 0.013$; $SE = 0.006$; 95% CI = [0.004, 0.025]).

Thus, and consistent with our prediction, rumination mediated the relationship between TBD and fat talk across increasing levels of neuroticism.

Discussion

This study sought to place fat talk within RST (Nolen-Hoeksema et al., 2008). We predicted that rumination would mediate the relationship between TBD and co-rumination in the form of fat talk, such that with increasing TBD, the greater would be the rumination and, following on from this, more frequent fat talk (Arroyo et al., 2017; Shannon & Mills, 2019). We also predicted that neuroticism would moderate this mediation pathway. The results of this study supported our predictions.

The significant mediation pathway is consistent with contemporary RST, research linking co-rumination with fat talk, as well as prospective findings suggesting that those higher in rumination are more likely to engage in co-ruminative discussions with friends (Jose et al., 2012; Nolen-Hoeksema et al., 2008; Rudiger & Winstead, 2013). This would suggest that with increasing TBD women increasingly engage in rumination in an attempt to cope with their TBD by focusing on the causes and consequences of their dissatisfaction. Following on from this, the significant mediation suggests that such rumination was increasingly expressed in the interpersonal context as fat talk. Building on previous research and theory we suggest that with increasing rumination about the body

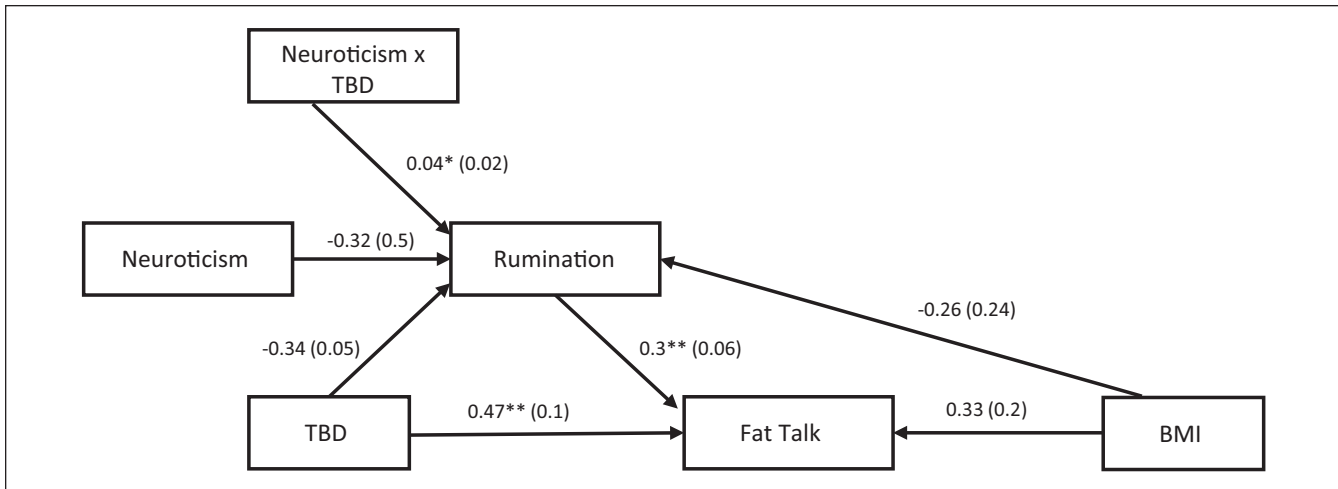


Figure 2. Proposed moderated mediation model. Estimates presented are unstandardized values. Standard errors in parentheses. Note. TBD = trait body dissatisfaction; BMI = body mass index. * $p < .05$. ** $p < .01$.

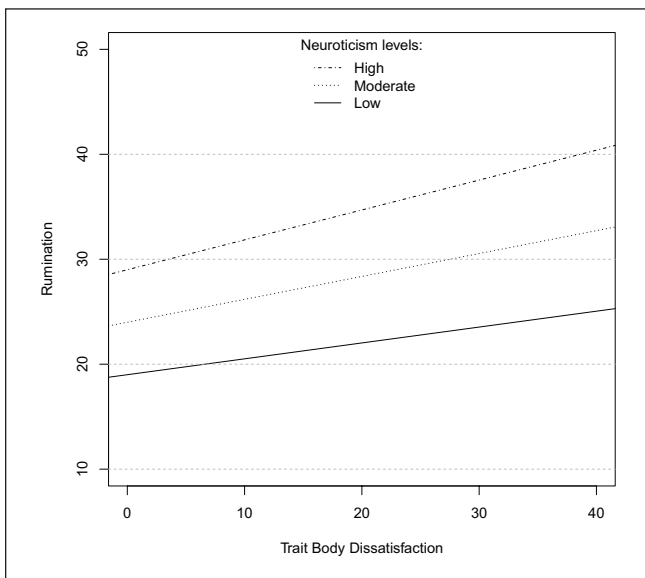


Figure 3. Interaction between trait body dissatisfaction, and low, average, and high levels of neuroticism and their relationship with rumination. The values are presented using unstandardized data.

there was a greater motivation to engage in cathartic self-disclosure and/or seek social support and reassurance from others (Gapinski et al., 2003; Nichter, 2000; Rose, 2002; Salk & Engeln-Maddox, 2011; Shannon & Mills, 2019). Unfortunately, a large body of research strongly indicates that, rather than being a healthy adaptation to body image concerns, fat talk has significant negative consequences for well-being (Arroyo et al., 2014; Arroyo & Harwood, 2012; Shannon & Mills, 2015). It is important to note that this is entirely consistent with research linking co-rumination with psychological distress (Calmes & Roberts, 2008; Rose, 2002).

Like rumination, co-rumination is thought to exert its negative influence by making salient negative thoughts and feelings, interfering with problem solving and impeding instrumental behavior (Nolen-Hoeksema et al., 2008; Rose, 2002). Such being the case, future researchers could perhaps examine whether these mechanisms mediate the influence of fat talk on psychological well-being.

The exacerbating role of neuroticism reported in this study converges with previous research indicating that those higher in neuroticism tend to engage in more rumination because of a negativity bias in attention and memory (Nolen-Hoeksema et al., 2008; Muris et al., 2005; Roberts et al., 1998). The influence of neuroticism is also consistent with research findings indicating a robust relationship between neuroticism and negative body image as well as disordered eating in women (Allen & Walter, 2016). In light of the significant moderated mediation, we speculate that, in the context of increasing TBD, those women higher in neuroticism may be more likely to engage in ruminative thinking about the causes and consequences of their dissatisfaction. Following on from this, these women are also particularly likely to engage in ruminative discussions as a form of coping, albeit maladaptive in its effects. Given the relationship between neuroticism and clinical levels of disordered eating (Cassin & von Ranson, 2005), it may be that co-rumination in the form of fat talk is an important mechanism that develops and maintains such pathology. A potential avenue of future research could examine this question prospectively or indeed test whether the reported moderated mediation model is present in a clinical population.

Also as predicted the moderated mediation model occurred when controlling for self-reported body size. College women, and in particular those higher in neuroticism, therefore appear to be dissatisfied with their body regardless of body size, ruminate, and engage in fat talk as a result (Arroyo, 2014;

Corning & Gondoli, 2012; MacNeil et al., 2017; Salk & Engeln-Maddox, 2011). One interpretation of this finding is that TBD is a result of an internalized version of a pervasive cultural aesthetic thin-ideal that is out of the reach of most women, even those of normal body size (Thompson & Stice, 2001). As a consequence, many college women, and in particular those higher in neuroticism, despite being of normal body size will feel dissatisfied with their body, ruminate about not being thin-enough, and unfortunately engage in fat talk as a consequence.

The practical implications of our study suggest that those women higher in both TBD and neuroticism are particularly likely to engage in, and suffer the consequences of, fat talk. It may be appropriate, therefore, for these women to be targeted as part of a psychoeducational intervention aimed at reducing exposure to fat talk as well as actively discouraging fat talk (Garnett et al., 2014; Shannon & Mills, 2015). However, while these interventions are effective against reducing the situational propensity to engage in fat talk, our results and RST suggest that some women may also require an individualized intervention. Specifically, women higher in both TBD and neuroticism would perhaps also benefit from interventions aimed at developing more adaptive responses to their body image distress rather than engaging in rumination and expressing fat talk. In this regard both mindfulness and acceptance-based therapies have been found to be efficacious in the treatment of depressive rumination (Nolen-Hoeksema et al., 2008). Within contemporary body image research there would appear to be an absence of treatments focused on the psychological underpinnings of fat talk (Shannon & Mills, 2019). We therefore suggest that a useful direction for future research is to examine the efficacy of these therapies in reducing fat talk, especially amongst those women especially likely to ruminate about their body image distress.

In this study, we sought to place fat talk within RST (Nolen-Hoeksema, 1991; Nolen-Hoeksema et al., 2008) by defining this phenomenon as an interpersonal manifestation of rumination (Jose et al., 2012; Rose, 2002). Our results suggest that RST may help provide further insight into the causes and consequences of fat talk. For example, some research indicates that women engage in significantly more negative body talk than men (Payne et al., 2011). This converges with findings using RST demonstrating that women have a greater tendency to engage in rumination than men (Nolen-Hoeksema, 2012). Furthermore, RST could help clarify the nature of the relationship between TBD and fat talk. In this regard, Sharpe et al. (2013) suggest that fat talk leads to increased body dissatisfaction. According to RST these could reflect a form of reciprocal causation whereby initial levels of TBD evoke rumination, but then co-rumination in the form of fat talk may function to promote further increases in TBD (Nolen-Hoeksema et al., 2008). However, in order to clarify the temporal nature of the relationship between TBD and fat talk, future research using controlled longitudinal designs is required (Mills & Fullertyszkiwicz, 2017; Shannon & Mills, 2015).

While this study could be said to provide a new insight into the phenomena of fat talk, it nevertheless has a number of limitations. First, the cross-sectional nature of the study precludes any causal conclusion being drawn. Indeed, and as already noted, longitudinal investigations are not only required to determine the causal nature of the mediation pathway reported in this study but also whether the reported moderated mediation model predicts changes in fat talk over time. Second, this study took place in a predominantly White undergraduate population. This limits our ability to generalize the findings from this study to other populations. Future studies should therefore examine whether our findings are generalizable to men, older and younger women as well as other ethnicities. Third, this study utilized self-report and is thus open to social desirability bias. Future studies would benefit by the use of behavioral observation, whereby observed engagement in fat talk would serve as the criterion variable. Finally, the measure of fat talk used in this study does not take account of the dyadic nature of fat talk that would usually involve an initiation of fat talk and then a response to the fat talk. With this in mind, we would expect that those higher in both TBD and neuroticism are particularly likely to initiate a fat talk conversation, as well as be less likely to challenge fat talk and thus attenuate its toxic effects (Mills et al., 2019).

To conclude, and in accordance with RST, this study found that with increasing TBD, college women engaged in more rumination and more frequent co-ruminative discussions in the form of fat talk. Furthermore, increasing levels of neuroticism moderated this mediation pathway. Given the negative consequences of engaging in fat talk, the significant findings of this study suggest that interventions to prevent or reduce the impact of fat talk should be targeted at those women higher in both TBD and neuroticism.

Declaration of Conflicting Interests

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References

- Allen, M. S., & Walter, E. E. (2016). Personality and body image: A systematic review. *Body Image, 19*, 79–88. <https://doi.org/10.1016/j.bodyim.2016.08.012>
- Arroyo, A. (2014). Connecting theory to fat talk: Body dissatisfaction mediates the relationships between weight discrepancy, upward comparison, body surveillance, and fat talk. *Body Image, 11*(3), 303–306. <https://doi.org/10.1016/j.bodyim.2014.04.006>

- Arroyo, A., & Harwood, J. (2012). Exploring the causes and consequences of engaging in fat talk. *Journal of Applied Communication Research, 40*(2), 167–187. <https://doi.org/10.1080/00909882.2012.654500>
- Arroyo, A., Segrin, C., & Harwood, J. (2014). Appearance-related communication mediates the link between self-objectification and health and well-being outcomes. *Human Communication Research, 40*(4), 463–482. <https://doi.org/10.1111/hcre.12036>
- Arroyo, A., Segrin, C., Harwood, J., & Bonito, J. A. (2017). Co-rumination of fat talk and weight control practices: An application of confirmation theory. *Health Communication, 32*(4), 438–450. <https://doi.org/10.1080/10410236.2016.1140263>
- Bowman, R. L., & DeLucia, J. L. (1992). Accuracy of self-reported weight: A meta-analysis. *Behavior Therapy, 23*(4), 637–655. [https://doi.org/10.1016/S0005-7894\(05\)80226-6](https://doi.org/10.1016/S0005-7894(05)80226-6)
- Calmes, C. A., & Roberts, J. E. (2008). Rumination in interpersonal relationships: Does co-rumination explain gender differences in emotional distress and relationship satisfaction among college students? *Cognitive Therapy and Research, 32*(4), 577–590. <https://doi.org/10.1007/s10608-008-9200-3>
- Cassin, S. E., & von Ranson, K. M. (2005). Personality and eating disorders: A decade in review. *Clinical Psychology Review, 25*(7), 895–916. <https://doi.org/10.1016/j.cpr.2005.04.012>
- Clarke, P. M., Murnen, S. K., & Smolak, L. (2010). Development and psychometric evaluation of a quantitative measure of “fat talk”. *Body Image, 7*(1), 1–7. <https://doi.org/10.1016/j.bodyim.2009.09.006>
- Compeau, A., & Ambwani, S. (2013). The effects of fat talk on body dissatisfaction and eating behaviour: The moderating role of dietary restraint. *Body Image, 10*(4), 451–461. <https://doi.org/10.1016/j.bodyim.2013.04.006>
- Coming, A. F., & Gondoli, D. (2012). Who is most likely to fat talk? A social comparison perspective. *Body Image, 9*(4), 528–531. <https://doi.org/10.1016/j.bodyim.2012.05.004>
- Derryberry, D., & Reed, M. A. (1994). Temperament and attention: Orienting toward and away from positive and negative signals. *Journal of Personality and Social Psychology, 66*(6), 1128–1239. <https://doi.org/10.1037/0022-3514.66.6.1128>
- Garnett, B. R., Buelow, R., Franko, D. L., Becker, C., Rodgers, R. F., & Austin, S. B. (2014). The importance of campaign saliency as a predictor of attitude and behavior change: A pilot evaluation of social marketing campaign fat talk free week. *Health Communication, 29*(10), 984–995. <https://doi.org/10.1080/10410236.2013.827613>
- Gapinski, K. D., Brownell, K. D., & LaFrance, M. (2003). Body objectification and “fat talk”: Effects on emotion, motivation, and cognitive performance. *Sex Roles, 48*(9–10), 377–388. <https://doi.org/10.1023/A:1023516209973>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Iacobucci, D., Saldanha, N., & Deng, X. (2007). A meditation on mediation: Evidence that structural equations models perform better than regressions. *Journal of Consumer Psychology, 17*(2), 139–153. [https://doi.org/10.1016/S1057-7408\(07\)70020-7](https://doi.org/10.1016/S1057-7408(07)70020-7)
- John, O. P., & Srivastava, S. (1999). The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102–138). Guilford Press.
- Jose, P. E., Wilkins, H., & Spendelov, J. S. (2012). Does social anxiety predict rumination and co-rumination among adolescents? *Journal of Clinical Child and Adolescent Psychology, 41*(1), 86–91. <https://doi.org/10.1080/15374416.2012.632346>
- Just, N., & Alloy, L. B. (1997). The response styles theory of depression: Tests and an extension of the theory. *Journal of Abnormal Psychology, 106*(2), 221–229. <https://doi.org/10.1037/0021-843X.106.2.221>
- Lahey, B. B. (2009). Public health significance of neuroticism. *American Psychologist, 64*(4), 241–256. <https://doi.org/10.1037/a0015309>
- MacNeill, L. P., Best, L. A., & Davis, L. L. (2017). The role of personality in body image dissatisfaction and disordered eating: Discrepancies between men and women. *Journal of Eating Disorders, 5*(1), Article 44. <https://doi.org/10.1186/s40337-017-0177-8>
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology, 52*(1), 81–90. <https://doi.org/10.1037/0022-3514.52.1.81>
- Mendelson, B. K., Mendelson, M. J., & White, D. R. (2001). Body-Esteem Scale for adolescents and adults. *Journal of Personality Assessment, 76*(1), 90–106. https://doi.org/10.1207/S15327752JPA7601_6
- Mills, J., & Fuller-Tyszkiewicz, M. (2017). Fat talk and body image disturbance: A systematic review and meta-analysis. *Psychology of Women Quarterly, 41*(1), 114–129. <https://doi.org/10.1177/0361684316675317>
- Mills, J., Mort, O., & Trawley, S. (2019). The impact of different responses to fat talk on body image and socioemotional outcomes. *Body Image, 29*(June), 149–155. <https://doi.org/10.1016/j.bodyim.2019.03.009>
- Muris, P., Roelofs, J., Rassin, E., Franken, I., & Mayer, B. (2005). Mediating effects of rumination and worry on the links between neuroticism, anxiety and depression. *Personality and Individual Differences, 39*(6), 1105–1111. <https://doi.org/10.1016/j.paid.2005.04.005>
- Nichter, M. (2000). *Fat talk: What girls and their parents say about dieting*. Harvard University Press.
- Nichter, M., & Vuckovic, N. (1994). Fat talk: Body image amongst adolescent girls. In N. Sault (Ed.), *Many mirrors: Body image and social relations* (pp. 109–131). Rutgers University Press.
- Nolan, S. A., Roberts, J. E., & Gotlib, I. H. (1998). Neuroticism and ruminative response style as predictors of change in depressive symptomatology. *Cognitive Therapy and Research, 22*(5), 445–455. <https://doi.org/10.1023/A:1018769531641>
- Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology, 100*(4), 569–582. <https://doi.org/10.1037/0021-843X.100.4.569>
- Nolen-Hoeksema, S. (2012). Emotion regulation and psychopathology: The role of gender. *Annual Review of Clinical Psychology, 8*, 161–187. <https://doi.org/10.1146/annurev-clinpsy-032511-143109>
- Nolen-Hoeksema, S., Morrow, J., & Fredrickson, B. L. (1993). Response styles and the duration of episodes of depressed mood. *Journal of Abnormal Psychology, 102*(1), 20–28. <https://doi.org/10.1037/0021-843X.102.1.20>

- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science*, 3(5), 400–424. <https://doi.org/10.1111/j.1745-6924.2008.00088.x>
- Ousley, L., Cordero, E. D., & White, S. (2008). Fat talk among college students: How undergraduates communicate regarding food and body weight, shape and appearance. *Eating Disorders: The Journal of Treatment & Prevention*, 16(1), 73–84. <https://doi.org/10.1080/10640260701773546>
- Papageorgiou, C., & Wells, A. (Eds.). (2004). *Depressive rumination: Nature, theory and treatment*. John Wiley. <https://doi.org/10.1002/9780470713853>
- Payne, L. O., Martz, D. M., Tompkins, K. B., Petroff, A. B., & Farrow, C. V. (2011). Gender comparisons of fat talk in the United Kingdom and the United States. *Sex Roles*, 65(7–8), 557–565. <https://doi.org/10.1007/s11199-010-9881-4>
- Pedhazur, E. (1982). *Multiple regression in behavioral research: Explanation and prediction*. Holt, Rinehart & Winston.
- Roberts, J. E., Gilboa, E., & Gotlib, I. H. (1998). Ruminative response style and vulnerability to episodes of dysphoria: Gender, neuroticism, and episode duration. *Cognitive Therapy and Research*, 22(4), 401–423. <https://doi.org/10.1023/A:1018713313894>
- Roelofs, J., Huibers, M., Peeters, F., Arntz, A., & van Os, J. (2008). Rumination and worrying as possible mediators in the relation between neuroticism and symptoms of depression and anxiety in clinically depressed individuals. *Behaviour Research and Therapy*, 46(12), 1283–1289. <https://doi.org/10.1016/j.brat.2008.10.002>
- Rose, A. J. (2002). Co-rumination in the friendships of girls and boys. *Child Development*, 73(6), 1830–1843. <https://doi.org/10.1111/1467-8624.00509>
- Royal, S., Macdonald, D. E., & Dionne, M. M. (2013). Development and validation of the Fat Talk Questionnaire. *Body Image*, 10(1), 62–69. <https://doi.org/10.1016/j.bodyim.2012.10.003>
- Rudiger, J. A., & Winstead, B. A. (2013). Body talk and body-related co-rumination: Associations with body image, eating attitudes, and psychological adjustment. *Body Image*, 10(4), 462–471. <https://doi.org/10.1016/j.bodyim.2013.07.010>
- Salk, R. H., & Engeln-Maddox, R. (2011). “If you’re fat, then I’m humongous!”: Frequency, content, and impact of fat talk among college women. *Psychology of Women Quarterly*, 35(1), 18–28. <https://doi.org/10.1177/0361684310384107>
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner’s guide to structural equation modeling*. Psychology Press. <https://doi.org/10.4324/9781410610904>
- Shannon, A., & Mills, J. S. (2015). Correlates, causes, and consequences of fat talk: A review. *Body Image*, 15, 158–172. <https://doi.org/10.1016/j.bodyim.2015.09.003>
- Shannon, A., & Mills, J. S. (2019). Thinking about overeating results in higher likelihood of anticipated fat talk. *Body Image*, 31, 13. <https://doi.org/10.1016/j.bodyim.2019.08.003>
- Sharpe, H., Naumann, U., Treasure, J., & Schmidt, U. (2013). Is fat talking a causal risk factor for body dissatisfaction? A systematic review and meta-analysis. *International Journal of Eating Disorders*, 46(7), 643–652. <https://doi.org/10.1002/eat.22151>
- Stice, E., & Shaw, H. E. (2002). Role of body dissatisfaction in the onset and maintenance of eating pathology: a synthesis of research findings. *Journal of Psychosomatic Research*, 53(5), 985–993. [https://doi.org/10.1016/s0022-3999\(02\)00488-9](https://doi.org/10.1016/s0022-3999(02)00488-9)
- Thompson, J. K., & Stice, E. (2001). Thin-ideal internalization: Mounting evidence for a new risk factor for body-image disturbance and eating pathology. *Current Directions in Psychological Science*, 10(5), 181–183. <https://doi.org/10.1111/1467-8721.00144>
- Tiggeman, M. (2011). Sociocultural perspectives on human appearance and body image. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (pp. 12–19). Guilford Press.
- Warren, C. S., Holland, S., Billings, H., & Parker, A. (2012). The relationships between fat talk, body dissatisfaction, and drive for thinness: Perceived stress as a moderator. *Body Image*, 9(3), 358–364. <https://doi.org/10.1016/j.bodyim.2012.03.008>
- Widiger, T. A., & Oltmanns, J. R. (2017). Neuroticism is a fundamental domain of personality with enormous public health implications. *World Psychiatry*, 16(2), 144–145. <https://doi.org/10.1002/wps.20411>