The Impact of Different Responses to Negative Body Talk on Body Satisfaction, Shame, and
Future Fat Talk Likelihood: A UK Sample

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Abstract

A recent online experiment found that, following a negative body talk induction task, receiving a response of ignoring the comment, compared with reassuring, reciprocating, and challenging, led to worse body satisfaction and socio-emotional outcomes for Australian women. The current online study aimed to replicate and extend this study by examining the effects of these four negative body talk responses on body satisfaction, shame, and future negative body talk likelihood in UK-based women. Participants ($N = 156$, $M_{\text{age}} = 25.29$, $SD_{\text{age}} = 5.64$, $\text{range}_{\text{age}} = 18-40$) recalled a scenario in which they engaged in negative body talk and were randomly assigned to receive one of four responses. Contrary to hypotheses, there were no significant differences in body satisfaction, shame, or future negative body talk likelihood across the four groups. Preferred negative body talk response data were mixed, with challenge and reassurance responses preferred at comparable rates, and just under a quarter of participants preferring a response outside of the original four. Possible explanations, including that the responses used in the original Australasian study may not perfectly correspond with UK women's experiences of social interactions and heterogeneous motivations for engaging in negative body talk necessitate more nuanced and sophisticated responses, are explored.

Keywords: negative body talk, body image, body satisfaction, shame, socioemotional

The Impact of Different Responses to Negative Body Talk on Body Satisfaction, Shame, and Future Negative Body Talk Likelihood: A UK Sample

Negative body talk, which refers to the negative commentary that individuals make about their own weight or body shape (Nichter & Vuckovic, 1994), has become a normative phenomenon in Western cultures, with one study reporting that 96.9% of women engage in at least one episode per week (Jones, Crowther, & Ciesla, 2014; Martz, Petroff, Curtin, & Bazzini, 2009; Salk & Engeln-Maddox, 2011). Despite often being made with the positive intention of helping someone else feel better about their body, negative body talk is far from innocuous and its overall effect on body image is damaging (Mills & Fuller-Tyszkiewicz, 2018). Cross-sectional studies have found that women who frequently engage in negative body talk are more likely to check their own appearance, make comparisons with body ideals, and have increased body dissatisfaction (Mills & Fuller-Tyszkiewicz, 2016; Shannon & Mills, 2015). Furthermore, based on the findings of prospective studies, two systematic reviews have demonstrated that body dissatisfaction increases due to negative body talk engagement (Mills & Fuller-Tyszkiewicz, 2016; Sharpe, Naumann, Treasure, & Schmidt, 2013). These findings are not surprising given that negative body talk perpetuates negative self-perceptions and perceived pressure to be thin among women (Arroyo & Harwood, 2012). In addition to these negative body image outcomes, negative body talk has also been linked with symptoms of mental health conditions, such as eating disorders, anxiety, and depression (Mills & Fuller-Tyszkiewicz, 2016; Shannon & Mills, 2015).

Given these negative outcomes associated with negative body talk, current national guidelines and interventions urge women to “shut down” or “drop” negative body talk (Rodgers et al., 2018, p.1366; The Butterfly Foundation, 2019, p. 2). To that end, as part of their Fat Talk Free campaign, the Butterfly Foundation (2019) in Australia recommends that women disengage from negative body talk by diverting the conversation to a new topic.

Alternatively, it is recommended that women who have made disparaging body-related remarks are complimented on something positive about their personality (The Butterfly Foundation, 2019). In a similar vein, the slogan of the Fat Talk Free Week campaign in the US and the UK was: “Friends don’t let friends fat talk”, which encouraged college women to ban negative body talk in conversations (Rochman, 2010, p. 1). Whilst these approaches recommend disengaging from negative body talk by ignoring, shutting down, or banning conversations involving negative body-related comments, there is no empirical evidence that supports the effectiveness of this strategy in either discouraging negative body talk participation or the associated body image consequences.

Banning, shutting down, or ignoring negative body talk is also not a response that women are typically inclined to offer to one another. Women expect each other to reciprocate self-degrading body talk (e.g., “I should really go on a diet too”), as opposed to ignoring or dismissing it (Britton et al., 2006, p. 6). Other typical responses to negative body talk include positive comments that intend to deny the negative body talk and provide reassurance (e.g., “You are not fat at all.”) (Becker, Diedrichs, Jankowski, & Werchan, 2013, p. 7; Salk & Engeln-Maddox, 2011). Reassuring has also emerged as the most desired responses to negative body talk by young adult women across several studies (Becker et al., 2013; Mills, Mort, & Trawley, 2019; Salk & Engeln-Maddox, 2011). These findings are consistent with the original research on the social phenomenon that identified reassurance-seeking as the primary reason for engaging in negative body talk (Nichter & Vuckovic, 1994).

In addition to research assessing typical and desired responses to negative body talk, a small number of studies have also examined which type of negative body talk responses can effectively prevent the perpetuation of negative body talk and reduce body dissatisfaction. Two of these studies compared challenging negative body talk, as an alternative response, with reciprocating negative body talk (Ambwani, Baumgardner, Guo, Simms, &

Abromowitz, 2017; Salk & Engeln-Maddox, 2012). Salk and Engeln-Maddox's (2012) study examined participants' reactions to two female confederates' conversation about an advertisement featuring a fashion model. Participants were randomised into three conditions where they witnessed conversations during which negative body talk was 1) reciprocated, e.g., "Ugh, look at her thighs. Makes me feel so fat. Yeah me too", 2) challenged, e.g., "I know we all say things like that but I don't understand why. I just wish we focused on other things", or 3) no negative body talk occurred (Salk & Engeln-Maddox, 2012, p. 640). Participants in the challenge condition indicated that they were less likely to engage in future negative body talk compared to the "reciprocate" or "no negative body talk" conditions. The challenge condition also resulted in lower levels of body dissatisfaction and guilt compared to the reciprocate condition.

In Ambwani et al.'s (2017) study, participants were randomised into two conditions where they viewed vignettes describing negative body talk between two people, which was either reciprocated or challenged by feminist ideas. These ideas included appreciating one's body for its functionality, not basing self-worth on appearance, and rejecting societal pressures associated with being thin. Responses included statements such as "It's not fair to compare ourselves to those models" or "I've been trying to focus more on how my body feels" (Ambwani et al., 2017, p. 87). Results indicated that participants who were in the challenge condition reported experiencing less negative affect and lower likelihood of future negative body talk compared to those in the reciprocate condition. Based on this study, as well as Salk and Engeln-Maddox's (2012) findings, challenging negative body talk appears to be associated with more positive effects compared to reciprocating negative body talk.

Whilst the previously reviewed studies typically compared the effects of two different negative body talk responses, a more recent empirical study by Mills et al. (2019) examined the impact of four distinct negative body talk responses on socio-emotional and body image

outcomes in a sample of Australian women. In addition to investigating the effect of challenging, reciprocating, and reassuring negative body talk, this study also examined the impact of ignoring negative body talk on body satisfaction, shame, and perceived social support. Participants were first asked to recall and write about a situation where they had engaged in negative body talk. Participants were then randomly allocated to one of the four groups, where they imagined that someone responded to their negative body talk by either 1) challenging, 2) ignoring, 3) reassuring, or 4) reciprocating it. Mills et al.'s (2019) study showed that participants in the ignore condition felt less supported than participants in the other three conditions, and they experienced a higher level of shame compared to participants in the challenge condition. The findings also indicated that, in comparison to reciprocating negative body talk, ignoring negative body talk resulted in decreased body satisfaction. Critically, in direct contradiction to the recommendation of national guidelines (The Butterfly Foundation, 2019), the findings of this study suggest that ignoring someone's negative body talk comments has deleterious effects on the individual both in terms of body image and socio-emotional outcomes. However, a key limitation of Mills et al.'s study was the lack of early verification that participants understood the definition of negative body talk as used in the study, resulting in a substantial number of responses referring to related but distinct phenomena, such as weight shaming, that then needed to be removed from analysis. Additionally, Mills et al. did not capture the impact of these four responses on a person's likelihood of engaging in negative body talk in the future.

Aims and Hypotheses

The current study has four main purposes. Firstly, given the important implications of Mills et al.'s findings for future negative body talk campaigns and policies, there is a need to replicate this study in other samples. Akin to those in Australia and the US, anti-negative body talk campaigns in the UK (e.g., Fight Fat Talk Campaign; Bell, 2014) have also advised

young people to ignore each other's negative body talk. However, no known studies have investigated the effect of different responses to negative body talk in UK-based samples. Research shows that there are similarities in the appearance culture experienced by adolescent girls in Australia and the UK (Carey et al., 2013; Evans & Rich, 2008), as well as similar levels of body image constructs in adult women, including thin ideal internalization and appearance and thinness pressures from the media (Schaefer et al., 2018). Negative body talk is as common in the UK as in Australia and the US (Becker et al., 2013), with results of a previous study showing that 51% of English women hear negative body talk or feel pressured to engage in negative body talk either "frequently" or "very frequently" (Payne et al., 2011, p. 562). Therefore, the current study will aim to investigate the effect of the four negative body talk responses (Challenge, Ignore, Reassure, and Reciprocate) on body satisfaction and shame, using a UK-based sample.

Secondly, the current study aims to extend past research (i.e., Ambwani et al., 2017; Salk & Engeln-Maddox, 2012) and assess a broader range of responses and their impact on future negative body talk likelihood. Past research has focused on the challenge and reciprocation responses, whilst the reassurance response has received very little to no research attention (aside from Mills et al., 2019), despite Nichter and Vuckovic's (1994) original work suggesting that receiving reassurance that one's body image concerns are unfounded is a likely response that may impact a person's likelihood of continuing to engage in negative body talk. The reassurance response is thought to satisfy the underlying motivation of the person engaging in negative body talk (Nichter & Vuckovic, 1994), however, this mollification is likely to only be temporary and, through positive reinforcement, may in fact encourage further negative body talk in the future. Additionally, despite numerous international campaigns suggesting ignoring is the ideal method for handling negative body talk in a social context and implying that doing so will help break the

cycle, there is limited empirical evidence to support this, highlighting a gap in the literature. Having someone ignore their negative body talk comment would likely make a person feel shunned and potentially guilty, thereby making them less inclined to engage in negative body talk again. However, since disregarding the negative body talk comment is not addressing or even acknowledging the person's fundamental body image concerns, this reduction in future negative body talk is also unlikely to be particularly meaningful, as compared to the challenge response that attempts to target the maladaptive thinking behind the negative body talk. As such, the current study aims to build upon previous studies and test the impact of four responses (Challenge, Ignore, Reassure, and Reciprocate) on women's likelihood of future negative body talk.

Thirdly, in an effort to increase our understanding around the realistic nature of responses to negative body talk, the current study will also aim to identify participants' *preferred* negative body talk response, whether this be one of the four options used within the study or an entirely different response. And lastly, the current study aims to overcome one of the limitations of Mills et al.'s study by adding a brief check that participants are familiar with what is meant by the term negative body talk, as operationalized in the current study, before proceeding, in the hope that this screens out the majority of participants who have misunderstandings about the phenomenon and have not, in fact, engaged in it.

Given the similarities in body image constructs between Australian and UK women, it was hypothesised that participants in the Ignore condition would experience lower levels of body satisfaction and higher levels of shame compared to participants in the Challenge, Reassure, and Reciprocate conditions, as per Mills et al.'s Australian sample. In line with previous negative body talk response studies, it was also hypothesised that participants in the Challenge condition would indicate lower likelihood of future negative body talk engagement compared to participants in the other three conditions.

Method

Participants

Participants were 156 female volunteers, aged between 18 and 40 years ($M = 25.29$, $SD = 5.64$). Facebook advertising targeted women living in the United Kingdom (UK), with the majority of participants (124; 79.49%) identifying their ethnicity as English, 7.69% (12) as Scottish, 6.41% (10) as mixed ethnicities, with part being a UK ethnicity (e.g., French-English), 5.13% (8) as Welsh, and 1.28% (2) as Irish. Sixty-one women (40.38%) reported that they were single and approximately 34.62% of participants were students. Participants received no monetary reimbursement for their participation. The study received approval by the institute's Human Ethics Committee (HREC) prior to commencement.

Procedure

This study was conducted online. Participants of this study were recruited using Facebook advertising. Prior to commencing the study, participants were given a copy of the Plain Language Information Statement (PLIS), which provided information about participant rights, and detailed the purpose, method, demands and possible risks associated with the study. After providing informed consent, participants completed the demographic items, state feelings body satisfaction, shame, and future negative body talk likelihood (i.e., pre-manipulation measures), and trait negative body talk and body esteem.

After completing the pre-manipulation measures, participants read a definition and examples of negative body talk ("Fat talk¹ refers to verbal comments an individual makes that disparage their own physical appearance. Some examples include 'I am so fat,' 'I wish I had your body,' or 'I need to start a diet as soon as possible!'" ; Mills, Mort, & Trawley,

¹ The authors wish to acknowledge the potential stigmatisation caused by the term "fat talk" and note that the items and mood induction task used within this study were designed with the original research that coined the term "fat talk" in mind. As such, the majority of the paper refers to the phenomenon as "negative body talk", whilst the description of the items and mood induction task retain the use of "fat talk" to accurately reflect the participant experience.

2019, p. 151), and they were asked if they could clearly remember a time when they engaged in negative body talk. If the participant responded “No”, they were disqualified and directed to a page explaining why they were not considered eligible to participate. If participants answered “Yes”, they continued and were asked to think of, and write about, said previous instance where they had made a negative comment about their appearance. Specifically, participants were given instructions to describe the situation (where they were, who they were with, and what prompted their negative body talk) and their feelings associated with their negative body talk. Participants were encouraged to think and write about the experience for three minutes (there was an on-screen clock to help track time) to encourage them to give a considered response without spending too much time on the task.

Following this, participants were presented with one of the four negative body talk responses (Challenge, Ignore, Reassure, or Reciprocate). In each condition, participants were instructed to imagine that the other person responded to their negative body talk in one of the four ways even if it was unlikely for that individual to talk or behave the way the response indicated. In the Challenge condition, participants were asked to imagine that the other person said: “Come on, don’t be silly! I know everyone says things like that, but I wish they wouldn’t. The media and society want you to believe that your appearance is the most important thing about you, but it isn’t-the kind of person you are is much more important.” In the Ignore condition, participants imagined that the other person responded by saying nothing at all and instead he or she started a conversation about what they planned on doing on the weekend. In the Reassure condition, the other person said: “You are definitely not fat; you look great just the way you are!” In the Reciprocate condition participants imagined that the other person said: “If you think you’re fat, I must be humongous. I can’t believe you’re saying that about your thighs, I would love to have your legs instead of my wobbly ones!”

Participants then indicated their post-manipulation level of body satisfaction, shame, and future negative body talk likelihood. The allocated condition was then presented again and participants were asked to indicate to what extent this was their preferred response, what response they would have preferred out of the other three or an “other response” option, and why this was their preferred response. At the end of the survey, participants were encouraged to complete a mood repair task and were provided with an open textbox in the event they wished to provide feedback. Then participants were provided with debriefing information and the contact details of relevant helplines and websites (e.g., National Centre for Eating Disorders).

Materials

Pre-manipulation measures.

Demographics. Participants reported their gender, age, height (in cm), weight (in kg), country of origin (free text entry), ethnic identity (free text entry), current level of education, relationship status, living situation, and employment status.

Trait body esteem. The 35-item Body Esteem Scale (BES; Franzoi & Shields, 1984) was used to capture participants’ general level of satisfaction with a range of aspects of their body, such as “hips” and “face”. Responses were provided on a 5-point Likert scale from 1 (*Have strong negative feelings*) to 5 (*Have strong positive feelings*). Total scores were created by summing participant responses to each item. The BES has demonstrated sound psychometric properties, including good internal consistency ($\alpha = .78-.87$) and convergent validity (Franzoi & Herzog, 1986). In the current study, internal reliability was high ($\alpha = .93$).

Trait negative body talk. Participants’ tendency to make negative comments about their appearance was measured using the Negative Body Talk Scale (NBTS; Engeln-Maddox, Salk, & Miller, 2012). Both the body concerns subscale (e.g., “I need to start watching what I eat”) and body comparisons subscale (e.g., “Why can’t my body look like hers?”) of the

NBTS were used, with a 7-point scale capturing participants' responses, where 1 equated to *Never* and 7 equated to *Always*. Participant total scores were computed by tallying participant responses to all items. The NBTS has previously shown strong psychometric properties, including internal reliability (Engeln & Salk, 2016). Internal reliability in the current study was high, $\alpha = .95$.

Body satisfaction. The single item that was designed specifically for the original study ("To what extent do you feel satisfied about your appearance right now?") was used in the current study to capture participants' pre-manipulation body satisfaction level on a 5-point Likert scale from 1 (*Completely dissatisfied*) to 5 (*Completely satisfied*) (Mills et al., 2019). Numerous previous studies have used a single item measure for body satisfaction (e.g., Drutschinin, Fuller-Tyszkiewicz, De Paoli, Lewis, & Krug, 2017; Durkin, Paxton, & Sorbello, 2007; Fitzsimmons-Craft et al., 2016; Mills & Fuller-Tyszkiewicz, 2018; Pomerleau & Saules, 2007; Rogers, Fuller-Tyszkiewicz, Lewis, Krug, & Richardson, 2017), based on evidence that a single item measure shows construct validity and is also capable of distinguishing between different levels of body satisfaction over time (Fitzsimmons-Craft et al., 2016; Rogers et al., 2017).

Shame. The single item measure of shame that was designed specifically for the original study based off the structure of the body satisfaction single item was reused in the current study ("To what extent do you feel ashamed right now?"; Mills et al., 2019). Participants responded on a 5- Likert scale from 1 (*Not ashamed at all*) to 5 (*Extremely ashamed*).

Likelihood of engaging in negative body talk in future. A single item designed specifically for the current study, based off the single item measures of body satisfaction and shame that were generated specifically for Mills et al.'s original study ("Please indicate how likely it is that you will engage in fat talk in the future.") measured how likely the participants

believed they would engage in negative commentary about their appearance in the future.

Responses ranged from 1 (*Not at all likely*) to 5 (*Highly likely*).

Negative body talk check. To confirm that participants could remember a situation in which they had engaged in negative body talk, they were asked “Can you clearly remember a time when you made a comment like this about your appearance to someone else?”. This item was included in order to screen out those participants who could not remember engaging in negative body talk.

Post-manipulation measures.

Body satisfaction, shame, and likelihood of engaging in negative body talk.

The same single-item measures were used to measure post-manipulation body satisfaction, shame, and likelihood of engaging in negative body talk as pre-manipulation.

Preferred negative body talk response.

Three items measured participant preference for negative body talk responses. The first item asked if the response they were allocated was their preferred response, with response options ranging from 1 (*Definitely disagree*) to 5 (*Definitely agree*). The second item then asked “What response would you have preferred to have received? Please choose one” and provided participants with the following options: 1) “Have the fat talk challenged”, 2) “Have the fat talk ignored”, 3) “Have the fat talk reciprocated”, 4) “Be reassured about the concerns with my appearance I raised in my fat talk comment”, 5) “Other/Please specify” with a text box in which they could outline their preferred response. The final item was a qualitative item asking the participants to explain why this was their preferred response, with a text box provided.

Mood repair task.

In order to mitigate any possible distress caused by participating in the study, participants completed the following mood repair task: “Please think about and list five

positive things about your life in the textbox below.” According to Otway (2013), mood repair tasks can reduce negative affect associated with participating in studies.

Data Analysis

One-way ANCOVAs were run to test for significant group differences between the four negative body talk response conditions. Pre-measures were controlled for in their respective ANCOVAs by including them as covariates. For the qualitative data regarding participants’ description and justification of their preferred negative body talk responses, conventional content analysis was used (Hsieh & Shannon, 2005). The first author followed the steps outlined by Hsieh and Shannon. To begin with, the first author read through all qualitative responses in full, then re-read them with the view of highlighting certain words or phrases that captured the essence of participants’ preferred response to their negative body talk and their explanation for their preference, known as open coding. Due to the small number of responses and that the responses themselves were brief, the first author developed preliminary codes by reading all the responses in full, rather than a sub-sample. Then the first author re-read the responses, creating new codes and recoding responses as necessary. After all responses were coded, the first author focused on all responses within each code and collapsed across codes where fundamental similarities existed.

Results

Data Cleaning

A total of 202 participants completed the survey. Prior to analyses, participants’ responses were screened to check compliance with the inclusion criteria (i.e., that participants were female, aged between 18 and 40, identified as UK in their ethnicity, and could provide an account of a negative body talk experience). As six participants did not indicate their gender, 25 identified their ethnicity as being from outside the UK, and another 15 participants failed to provide an example of engaging in negative body talk, a total of 46 participants were

excluded from the analyses. Data from 156 participants were included in the analyses. A power analysis suggests the study was sufficiently powered to detect an effect size of $d = .45$, which is considered appropriate given the expected effect size was slightly larger, at $d = .50$.

The participants were randomly allocated into four conditions, each with a relatively equal number (Challenge $n = 38$, Ignore; $n = 36$, Reassure $n = 41$; Reciprocate $n = 41$). A maximum of 3.2% missing data was identified in any one variable and expectation maximisation was used to estimate and replace missing values (Tabachnick & Fidell, 2007). The assumptions of ANCOVA were met, including linearity, homogeneity of variance, homogeneity of regression slopes, independence of condition, and independence of covariate and factor (see below).

Descriptive Statistics

Three separate ANOVAs were run to test the independence of covariate and factor (Field, 2013). The analyses revealed no significant differences between the groups on pre-manipulation body satisfaction, $F(3, 152) = .13, p = .94, \eta_p^2 = .00$, pre-manipulation shame, $F(3, 152) = .04, p = .99, \eta_p^2 = .00$, or pre-manipulation future negative body talk likelihood, $F(3, 152) = .86, p = .47, \eta_p^2 = .02$.

ANOVAs were run to assess the differences between the four conditions in terms of age, trait body esteem, and trait negative body talk (see Table 1). There were no statistically significant differences between the four groups for age, $F(3, 152) = 0.47, p = .70, \eta_p^2 = .01$, or BMI, $F(3, 152) = 1.37, p = .25, \eta_p^2 = 0.03$. Further, no differences were found between the four groups in terms of trait body esteem $F(3, 152) = 0.30, p = .83, \eta_p^2 = .01$, or trait negative body talk, $F(3, 152) = .03, p = .99, \eta_p^2 = .00$.

Table 1

Unadjusted Means (SDs) for Age, BMI, Trait Body Esteem, Trait Negative Body Talk, Pre-manipulation Body Satisfaction, Shame, and Likelihood of Future Negative Body Talk

Variable	Negative body talk condition			
	Challenge	Ignore	Reassure	Reciprocate
Age	25.32 (6.09)	24.36 (5.86)	25.59 (4.86)	25.80 (5.84)
BMI	28.62 (7.41)	25.43 (5.44)	27.84 (7.60)	27.92 (7.94)
Trait body esteem	86.32 (23.34)	87.21 (13.39)	86.17 (22.59)	83.19 (19.19)
Trait negative body talk	49.97 (20.67)	50.53 (17.84)	49.49 (22.72)	49.25 (21.28)
Body satisfaction	2.37 (1.13)	2.44 (1.00)	2.32 (1.29)	2.29 (1.12)
Shame	3.05 (1.45)	3.15 (1.36)	3.15 (1.33)	3.14 (1.39)
Likelihood of future NBT	4.26 (1.11)	4.06 (1.22)	4.44 (1.00)	4.32 (0.93)

Note. NBT = negative body talk

Differences between the Four Conditions in terms of Body Satisfaction, Shame and Likelihood of Future Negative Body Talk

Table 2 and Figure 1 show adjusted means for post manipulation body satisfaction, shame, and future negative body talk likelihood. The ANCOVA for body satisfaction showed that, after controlling for initial body satisfaction scores, the four negative body talk conditions did not differ significantly in terms of post manipulation body satisfaction levels $F(3, 151) = 2.72, p = .05, \eta_p^2 = .05$. The ANCOVA for shame indicated that there was no statistically significant difference between the four negative body talk conditions, $F(3, 151) = 2.28, p = .08, \eta_p^2 = .04$. The ANCOVA for likelihood of future negative body talk engagement indicated that, after accounting for pre-manipulation likelihood of negative body talk, there was no statistically significant effect of negative body talk response on likelihood of future negative body talk following manipulation, $F(3, 151) = 2.61, p = .05, \eta_p^2 = .05$.²

² Sensitivity analyses were conducted on a slightly larger sample ($N=176$), which included 20 European participants to test the robustness of the findings. All results remained the same in the sensitivity analyses, which are presented as supplementary material.

Table 2

Adjusted Means (SE) for Body Satisfaction, Shame, and Likelihood of Future Negative Body Talk

	Response range	Challenge	Ignore	Reassure	Reciprocate
Body satisfaction	1-5	2.41 (.15)	1.84 (.16)	2.03 (.15)	1.94 (.15)
Shame	1-5	3.26 (.18)	3.92 (.18)	3.58 (.17)	3.66 (.17)
Likelihood of future NBT	1-5	3.85 (.14)	3.66 (.14)	4.06 (.13)	3.58 (.13)

Note. NBT = negative body talk

Figure 1. ANCOVAs for the three outcome measures (body satisfaction, shame, and future negative body talk likelihood) showing means after controlling for pre-manipulation scores.

* $p < .001$.

Preferred Negative Body Talk Responses

Forty-nine participants (31.41%) indicated that they would have preferred to have their negative body talk reassured and 46 participants (29.49%) preferred to have their negative body talk challenged. The Reciprocate response was preferred by only 11 people (7.05%) and the ignore by 10 people (6.41%). Forty people (25.64%) indicated their preference as being ‘other’ and provided a brief qualitative response. The most frequently identified alternative response that participants could clearly articulate was a validation of the feelings underlying negative body talk ($n = 6$, 15%). Full frequencies of the coded “other” qualitative responses are available in Table 3.

Table 3

Frequency of “Other” Preferred Responses to Negative Body Talk

Preferred response category	Example	Frequency	Percentage
Validation	"Just acknowledge my feelings and that you can't change them"	6	15.00
Negative body talk agreed with, sometimes with added practical tips	"Have the individual agree with me and give weight loss advice"	5	12.50
Challenged*	"Told I'm more than my body"	4	10.00
Emotional/psychological support	"Talk me through why I feel this way"	4	10.00
Encouragement to achieve appearance-related goals	"Them help me figure out how best to lose the weight in the healthiest manner"	4	10.00
Compassion/empathy	"I would like her to understand that I have the same issues as her and exhibit compassion"	3	7.50
Do not care	"I don't care how people respond"	3	7.50
No response would help	"There would be no point in challenging it because I'm still going to feel fat regardless of what the other person	3	7.50

	says. Nothing they could say would help"		
Combination of challenge and reassurance	"Both have the fat talk challenged and also be reassured about the concerns with my appearance raised in my fat talk comment"	2	5.00
Combination of reassurance and practical tips	"Be reassured about my concerns but also offer the support to do something about it"	2	5.00
Combination of challenge, reassurance, and reciprocation	"A mixture of all those things (except ignored)"	1	2.50
Combination of validation and reassurance	"Be acknowledged but reassured"	1	2.50
Ignored*	"Ignored"	1	2.50
Reassured*	"You're not fat"	1	2.50

Note. $n = 40$. *Unclear if participants noted that challenge, ignore, and reassure were already options or not and whether they wanted to specify different wording in response.

Discussion

The current study aimed to investigate the differences between four different negative body talk responses (Challenge, Ignore, Reassure, and Reciprocate) in terms of their effect on body satisfaction, shame, and likelihood of future negative body talk. The hypotheses were not supported as there was no difference between the four negative body talk response conditions in terms of their effect on post-manipulation body satisfaction, shame, or future negative body talk likelihood. These results depart from the original study comparing four negative body talk responses. In a largely Australian sample, Mills et al. found that state-level body satisfaction was lowest as a function of the Ignore condition, as compared to the Reciprocate condition and that the Ignore response led to higher levels of shame compared to the Challenge response. Using a UK-based sample, the current study did not find significant differences between the response conditions for either body satisfaction or shame levels. There are several potential explanations underlying these contrasting results.

Firstly, there could be cultural differences between Australia and the UK that mean the four responses used in the current study do not neatly map onto the UK experience of negative body talk. Although research has shown the appearance culture and even levels of negative body talk are similar between the two nations both in adolescence and adulthood (e.g., Carey et al., 2013; Evans & Rich, 2018; Schaefer et al., 2018), it is possible there are broader societal differences in how women speak in general, and specifically about their appearance. For example, Payne et al. (2011) acknowledged that there are varying standards around confidence in the UK and the US, whereby women in the US are more inclined to feel comfortable speaking in a self-accepting manner, whilst women in the UK feel pressure to exhibit diffidence. If the culturally expected and accepted way for a woman in the UK to speak is to be self-effacing, this norm may be so firmly engrained, more so than is speculated in Australia, that the response options in the current study are too simplistic or unrealistic to exert an effect. However, there has been no research into the perceived expectance of self-accepting talk in Australian women, so it is empirically unknown how the frequency of self-accepting talk compares across Australia, the UK, and the US.

Underlying this possible explanation is the notion that the response options used in Mills et al.'s original study are perhaps not representative of the reality of a negative body talk exchange. The reasons for engaging in negative body talk can vary from person to person, from context to context, such as needing to express sadness, seeking reassurance, or inviting advice (Nichter & Vuckovic, 1994), and this variability in motivation needs to be met with responses that are just as labile and comprehensive. In the current study, approximately 26% of participants indicated that they would have preferred a different response to their negative body talk other than to have it ignored, challenged, reassured, or reciprocated, slightly higher than the 19.9% of the Australian sample from Mills et al. Importantly, 10 of these participants in the current study indicated that they either wanted a

longer conversation about their negative body talk or would have liked a combination of at least two negative body talk responses (e.g., reassure and challenge). This may be reflective of the variety of underlying motivations behind negative body talk at any one time and suggests that the ideal negative body talk response addresses these multiple different reasons for engaging in negative body talk. Combining two or three negative body talk responses might be a more successful approach in terms of addressing these reasons and thus reducing body dissatisfaction, shame, and likelihood of future negative body talk. Indeed, a prior study that compared the effects of different responses to weight management utterances found that the combination of two messages (acceptance and challenge) in the same response was more effective in increasing individuals' self-esteem than the acceptance or the challenge response on its own (Dailey, Richards, & Romo, 2010). These findings suggest that a similar approach may be effective in a negative body talk context.

Implications

The findings of the present study support those of Mills et al. (2019) in indicating that some of the more simplistic responses promoted by anti-negative body talk campaigns are largely ineffective. For example, the ignore strategy, as advised by the UK's Fight Fat Talk Campaign (Bell, 2014), does not appear to be effective in reducing the impact or recurrence of negative body talk in the present study. As such, the results suggest that national campaigns should exercise caution and consider alternative recommendations.

The current findings suggest that there is unlikely to be a one-size-fits-all response that is effective for all individuals who engage in negative body talk across situations. Instead, the results suggest that the ideal negative body talk response differs from person to person and, likely, from context to context for each person too. Based on the qualitative findings from the current study, in combination with those of Mills et al. (2019),

interventions need to avoid oversimplified and reflexive responses to negative body talk, and instead encourage more adaptive, individualised responses.

Given this considerable inter- and intra-individual variability, it seems prudent to educate the public specifically in ways to respond accordingly. For example, a program that identifies the factors leading up to an instance of negative body talk to inform the response/s given could prove useful. It is worth noting, however, that the average member of the general public is unlikely to have the skills and/or the confidence necessary to engage in this type of conversation. Programs aimed at reducing negative body talk among young women could help raise the public's consciousness around the multiple motives behind negative body talk and how these can inform the response that might best reduce body dissatisfaction, shame, and/or future negative body talk engagement. Simultaneously, such programs could provide basic communication skills aimed to raising people's self-efficacy in holding these conversations. Ultimately, it seems there is a need to arm people, particularly young women, with a range of potential responses to choose from, based on the negative body talk situation at hand, to attempt to reduce the social phenomenon at the source.

Limitations

Despite attempts to overcome some of the issues that were highlighted in Mills et al.'s study (2019), the present study had some methodological limitations. For example, Mills et al. (2019) found that, for the mood induction task, a non-trivial number of participants described scenarios involving weight shaming rather than negative body talk. In the current study, a pre-testing component was added to ensure that the participants understood what negative body talk was and could decide whether they had engaged in this behaviour before. Despite all participants indicating in the pre-test that they had engaged in and could recall an experience of negative body talk, 15 provided a scenario that did not involve negative body

talk, suggesting that the explanation of negative body talk and the related task was still not described clearly enough. Thus, the study could have benefited from adding explicit step-by-step instructions where participants were asked to provide an example of their negative body talk. For example, participants could have been asked to finish the following sentences: 1) “I was at” (insert where the negative body talk happened), 2) “I was with....” (insert who you were with), 3) “I said to the person that I/My.....” (write your negative body talk comment), and lastly 4) “I felt...and I did...” (insert your feelings and what you were doing).

A further limitation of the mood induction task is the fact that the randomly allocated responses participants are asked to imagine may not map onto their reality. If a participant’s friend was, for example, someone who consistently returned negative body talk comments in real life, but the participant was given instructions to imagine their friend had given a more feminist-based response (i.e., Challenge condition), this could have undermined the ecological validity of the study for that participant. Perhaps simply asking participants to describe an actual response they have received from a friend and how it made them feel would be a valuable future study. Indeed, given the frequency of negative body talk and the range of possible responses in different scenarios, it seems an ecological momentary assessment (EMA) design may be appropriate to attempt to capture both components of the two-way interaction, i.e., the negative body talk comment by the participant and the response provided by the person/people they are with.

Moreover, although it was highlighted as a potential limitation in Mills et al.’s (2019) study, the current study did not specify or restrict participants’ negative body talk examples in terms of where they took place and with whom the conversations were held. A recent study, however, indicated that negative body talk responses may occur differently in situations whereby women engage in negative body talk during conversations with other women compared to situations where they engage in this behaviour whilst conversing with

men (SturtzSreetharan, Agostin, Brewis, & Wutich, 2019). The findings showed that women tend to reassure negative body talk when it is uttered by another woman, whilst men are likely to deflect or reciprocate women's negative body talk statements (SturtzSreetharan et al., 2019). It is also likely that the same negative body talk response will impact individuals differently depending on the nature and quality of their relationship with the other person. In the current study, the person responding to the negative body talk could have been a close family member, a friend, romantic partner, or an acquaintance. Not controlling for these relationship differences may have confounded the findings.

Additionally, the use of single item measures generated specifically for this study may represent a drawback. As mentioned in the Method, there is empirical support for the use of a single item body satisfaction measure and, in the current study, as per Mills et al., single-item measures were favoured over longer scales to reduce burden in what was already quite a demanding online survey. However, the fact that the shame and future negative body talk likelihood items were created specifically for this study and were not psychometrically tested prior to use remains a weak point.

Future Research

As both the current study and Mills et al.'s (2019) research used predominantly Western samples, investigating the effect of negative body talk responses on body image-related and socio-emotional outcomes in different cultures will be a key aspect of future research. A possible direction would be to extend the current research using samples from Eastern cultures, where the prevalence of societal messages idealising the thin body shape is now comparable to Western cultures (e.g., Ryu, Lyle, & McCabe, 2003). Eastern countries, however, as opposed to Western countries, have a more collectivistic orientation with a particularly high value placed on social contexts and other people's opinions (Schwartz,

1990). As such, past research has demonstrated that responses to witnessing two other people's conversation involving negative body talk or weight management practices affect body satisfaction more negatively for Korean and Japanese participants compared to US-based participants (Lee, Taniguchi, Modica, & Park, 2013; Taniguchi & Lee, 2012). Future studies could aim to qualitatively explore the way in which women in Eastern cultures communicate about their bodies and ascertain the preferred responses to negative body talk before attempting an experimental manipulation comparing different responses.

Conclusion

Despite negative body talk being a social phenomenon embedded in everyday conversations, the effect of different negative body talk responses on socioemotional and body image outcomes has only recently started to garner research interest. This is the second study that directly investigated the effect of four different negative body talk responses on body satisfaction and shame, along with Mills et al.'s (2019) study in an Australasian sample. The current study also extended prior research by comparing the four negative body talk responses in terms of their effects on women's reported likelihood of future negative body talk engagement. Contrastingly with Mills et al.'s study, the current findings showed that none of the negative body talk responses had a significant effect on body satisfaction, shame, or the likelihood of engaging in future negative body talk. A non-trivial number of participants nominated a longer discussion of the underlying reason/s for their negative body talk or a combination of responses, such as being reassured and then challenged, as their preferred response to their negative body talk comments. These findings, in combination with Mills et al.'s, suggest that, since negative body talk itself is multifaceted in terms of the underlying motives and contextual variability, the ensuing response needs to be tailored to suit each person, in each context, each time. Therefore, instead of searching for one ideal response to apply across individuals and cultures, future research should aim to identify a set

of best practice responses that is sensitive to the intra- and inter-individual variability inherent in negative body talk.

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Sensitivity Analyses

To help assess the robustness of the results from the main sample, sensitivity analyses were conducted (Thabane et al., 2013). The analyses were re-run including participants outside of the UK but within Europe ($N = 176$). The results of the sensitivity analyses are outlined below.

Method

Participants

Participants were 176 female volunteers, aged between 18 and 40 years ($M = 25.44$, $SD = 5.58$). Facebook advertising targeted women living in Europe, with the majority of participants (125; 71%) identifying their ethnicity as English. Sixty-eight women (38.6%) reported that they were in a serious relationship and approximately 34.1% of participants were students.

Results

Data Cleaning

A total of 202 participants completed the survey. Prior to analyses, participants' responses were screened to check compliance with the inclusion criteria (i.e., that participants were female, aged between 18 and 40, identified themselves as European, and could provide an account of a negative body talk experience). As six participants did not indicate their gender, 5 identified their ethnicity as not being European (e.g., American, Singaporean), and another 15 participants failed to provide an example of engaging in negative body talk, a total of 26 participants were excluded from the analyses. Data from 176 participants were included in these sensitivity analyses. A power analysis suggests this reduced sample size of European women was sufficiently powered to detect an effect size of $d = .42$, with the expected effect size being slightly larger, at $d = .50$.

The participants were randomly allocated into four conditions, each with a relatively equal number (Challenge $n = 43$, Ignore; $n = 42$, Reassure $n = 46$; Reciprocate $n = 45$). A maximum of 2.8% missing data was identified in any one variable and expectation maximisation was used to estimate and replace missing values (Tabachnick & Fidell, 2007). The assumptions of ANCOVA were met, including linearity, homogeneity of variance, homogeneity of regression slopes, independence of condition, and independence of covariate and factor (see below).

Descriptive Statistics

Three separate ANOVAs were run to test the independence of covariate and factor (Field, 2013). The analyses revealed no significant differences between the groups on pre-manipulation body satisfaction, $F(3, 172) = .32, p = .81, \eta_p^2 = .01$, pre-manipulation shame, $F(3, 172) = .07, p = .98, \eta_p^2 = .00$, or pre-manipulation future negative body talk likelihood, $F(3, 172) = .73, p = .54, \eta_p^2 = .01$.

ANOVAs were run to assess the differences between the four conditions in terms of age, trait body esteem, and trait negative body talk (see Table 4). There were no statistically significant differences between the four groups for age, $F(3, 172) = 0.46, p = .72, \eta_p^2 = .01$, or BMI, $F(3, 172) = 2.46, p = .06, \eta_p^2 = .04$. Further, no differences were found between the four groups in terms of trait body esteem $F(3, 172) = 0.37, p = .77, \eta_p^2 = .01$, or trait negative body talk, $F(3, 172) = .13, p = .94, \eta_p^2 = .00$.

Table 4

Unadjusted Means (SDs) for Age, BMI, Trait Body Esteem, Trait Negative Body Talk, Pre-manipulation Body Satisfaction, Shame, and Likelihood of Future Negative Body Talk

Variable	Negative body talk condition			
	Challenge	Ignore	Reassure	Reciprocate
Age	25.72 (6.21)	24.71 (5.75)	25.28 (4.68)	26.02 (5.71)
BMI	28.28 (7.12)	24.72 (5.40)	27.76 (7.21)	27.93 (7.41)
Trait body esteem	86.76 (22.46)	87.47 (14.55)	86.30 (21.75)	83.37 (18.27)
Trait negative body talk	50.25 (20.13)	50.40 (18.21)	48.02 (21.96)	49.91 (20.87)
Body satisfaction	2.44 (1.14)	2.45 (1.09)	2.33 (1.25)	2.24 (1.15)
Shame	3.09 (1.39)	3.20 (1.39)	3.13 (1.33)	3.07 (1.41)
Likelihood of future NBT	4.30 (1.06)	4.12 (1.15)	4.43 (1.03)	4.36 (0.91)

Note. NBT = negative body talk

Differences between the Four Conditions in terms of Body Satisfaction, Shame and Likelihood of Future Negative Body Talk

Table 5 and Figure 2 show adjusted means for post manipulation body satisfaction, shame, and future negative body talk likelihood. The ANCOVA for body satisfaction showed that, after controlling for initial body satisfaction scores, the four negative body talk conditions did not differ significantly in terms of post manipulation body satisfaction levels $F(3, 171) = 2.27, p = .08, \eta_p^2 = .04$. The ANCOVA for shame indicated that there was no statistically significant difference between the four negative body talk conditions, $F(3, 171) = 2.13, p = .10, \eta_p^2 = .04$. The ANCOVA for likelihood of future negative body talk engagement indicated that, after accounting for pre-manipulation likelihood of negative body talk, there was no statistically significant effect of negative body talk response on likelihood of future negative body talk following manipulation, $F(3, 171) = 3.44, p = .02, \eta_p^2 = .06$.

Table 5

Adjusted Means (SE) for Body Satisfaction, Shame, and Likelihood of Future Negative Body Talk

	Response range	Challenge	Ignore	Reassure	Reciprocate
Body satisfaction	1-5	2.32 (.14)	1.81 (.14)	1.94 (.14)	2.05 (.14)
Shame	1-5	3.22 (.17)	3.83 (.17)	3.63 (.17)	3.62 (.17)
Likelihood of future NBT	1-5	3.84 (.13)	3.63 (.13)	4.13 (.13)	3.63 (.13)

Note. NBT = negative body talk

Figure 2. ANCOVAs for the three outcome measures (body satisfaction, shame, and future negative body talk likelihood) showing means after controlling for pre-manipulation scores.

* $p < .001$.

Preferred Negative Body Talk Responses

Fifty-four participants (30.68%) indicated that they would have preferred to have their negative body talk reassured and 52 participants (29.55%) preferred to have their negative body talk challenged. The Reciprocate response was preferred by only 14 people (7.95%) and the Ignore by 10 people (5.68%). Forty-six people (26.14%) indicated their preference as being ‘other’ and provided a brief qualitative response. The most frequently identified alternative response that participants could clearly articulate was a validation of the feelings underlying negative body talk ($n = 6$, 13.04%), along with having someone agree with their negative body talk comment and occasionally offer practical advice regarding how to improve the part of their appearance featured in the comment. Full frequencies of the coded “other” qualitative responses are available in Table 6.

Table 6

Frequency of “Other” Preferred Responses to Negative Body Talk

Preferred response category	Example	Frequency	Percentage
Validation	"Just acknowledge my feelings and that you can't change them"	6	13.04
Negative body talk agreed with, sometimes with added practical tips	"Have the individual agree with me and give weight loss advice"	6	13.04
Emotional/psychological support	"Talk me through why I feel this way"	5	10.87
Encouragement to achieve appearance-related goals	"Them help me figure out how best to lose the weight in the healthiest manner"	5	10.87
Challenged*	"Told I'm more than my body"	4	8.70
Compassion/empathy	"I would like her to understand that I have the same issues as her and exhibit compassion"	3	6.52

Do not care	"I don't care how people respond"	3	6.52
No response would help	"There would be no point in challenging it because I'm still going to feel fat regardless of what the other person says. Nothing they could say would help"	3	6.52
Combination of challenge and reassurance	"Both have the fat talk challenged and also be reassured about the concerns with my appearance raised in my fat talk comment"	2	4.35
Combination of reassurance and practical tips	"Be reassured about my concerns but also offer the support to do something about it"	2	4.35
Combination of challenge, reassurance, and reciprocation	"A mixture of all those things (except ignored)"	1	2.17
Combination of validation and reassurance	"Be acknowledged but reassured"	1	2.17
Ignored*	"Ignored"	1	2.17
Reassured*	"You're not fat"	1	2.17
Combination of practical tips, encouraging gratitude, and encouraging intrinsic motivation	"I just want a better body, not buzzwordy virtue signalling. I'd rather people responded with practical, healthy advice as to steps I could take to get the body I want, while also pointing out how lucky I already am and that it should be for me, and not for other people."	1	2.17
Context-dependent	"The best response depends on a number of situational factors, including the age and health of the people involved, as well as the relationship between them."	1	2.17
Body positive comment	"Body positivity"	1	2.17

Note. $n = 46$. *Unclear if participants noted that challenge, ignore, and reassure were already options or not and whether they wanted to specify different wording in response.

References

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