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**Can appearance conversations explain differences between gay and heterosexual
men's body dissatisfaction?**

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Abstract

Men's body dissatisfaction is prevalent and a serious health concern as it is associated with negative outcomes including depression, disordered eating, and anabolic steroid abuse. Gay men are particularly vulnerable to body dissatisfaction, perhaps due to heightened sociocultural appearance pressures experienced in gay subculture.

Appearance conversations represent an underresearched, but potentially potent, mechanism of appearance pressures. The current study explored whether differences in the frequency of engaging in appearance conversations accounted for differences in body dissatisfaction and associated risk factors among gay and heterosexual men. A purposeful sample of gay (N = 77, Mage = 32.57) and heterosexual (N = 78, Mage = 25.30) men were recruited from community organizations in the United Kingdom.

Participants completed an online questionnaire assessing appearance conversations, body dissatisfaction, appearance orientation, and internalization of appearance ideals. Gay men reported more frequent engagement in positive and negative appearance conversations and greater body dissatisfaction, appearance orientation, and general internalization than heterosexual men. Moreover, frequency of appearance conversations mediated the relationship between sexuality and the majority of study variables, including body dissatisfaction ($p < .05$). These findings suggest that appearance conversations are an important sociocultural influence on male body image and that they are important in understanding the differences between gay and heterosexual men's body dissatisfaction and associated risk factors.

Keywords: men, body image, peers, fat talk, sexual orientation

The acceptability of a cognitive dissonance intervention on men

Studies have found that a large proportion of men (between 35-79%) experience body dissatisfaction (e.g., Mellor, Fuller-Tyszkiewicz, McCabe, & Ricciardelli, 2010; Lioffi, 2003). Additionally, men who report greater body dissatisfaction are also more likely to report greater conformity to traditional masculine norms than those who are body satisfied (Martin & Govender, 2011; Mishkind, Rodin, Silberstein, & Striegel-Moore, 1986; Schwartz, Grammas, Sutherkand, Siffert, & Bush-King, 2010). Further research also suggests that gay men may be more susceptible to experiencing body dissatisfaction than heterosexual men (Morrison, Morrison, & Sager, 2004). Body dissatisfaction has a number of negative health consequences, including depression (Olivardia, Pope, Borowiecki III, & Cohane, 2004), eating disorders (Pope et al., 2000) and steroid abuse (Kanayama, Barry, Hudson, & Pope, 2006). Therefore, the widespread prevalence of body dissatisfaction among men is concerning and warrants further investigation.

Several individual and sociocultural risk factors have been implicated in the development of body dissatisfaction among men. On an individual level, the degree to which men are appearance oriented (i.e., invested in the way they look; Cash, Melnyk, & Hrabosky, 2004; Spann & Pritchard, 2010) and the extent to which men internalize appearance ideals (Karazsia & Crowther, 2009; Spann & Pritchard, 2010; Tylka, 2011; Tylka & Andorka, 2012) have been associated with body dissatisfaction. In addition, extensive research documents the way in which sociocultural influences, including exposure to idealized bodies in the mass media and weight-related teasing and pressures from peers and family, relate to body dissatisfaction among men (Barlett, Vowels, & Saucier, 2008; Galioto, Karazsia, & Crowther, 2012). There is also evidence that gay men experience greater sociocultural appearance pressures than heterosexual men (Hospers & Jansen, 2005; McArdle & Hill, 2007; Yelland & Tiggemann, 2003) and this may explain gay men's higher levels of body dissatisfaction.

A relatively unstudied, but potentially important, additional risk factor for men is appearance conversations. Appearance conversations can be defined as any discourse that reinforces narrowly defined appearance ideals in society (e.g., the muscular, mesomorphic ideal for men and the thin ideal for women, Nichter, 2000; McArdle & Hill, 2007). These conversations may refer to numerous aspects of appearance including body fat, muscularity, and general appearance, and they can be framed positively (e.g., compliments, "Mate, your arms are huge!") and negatively (e.g., insults, criticisms, "You look fat"). Research has found that appearance conversations are widespread and predict body dissatisfaction among women (e.g., Stice, Maxfield, & Wells, 2003). Men also engage in appearance conversations (McArdle & Hill, 2007) and this has also been associated with body dissatisfaction (Galioto et al., 2012; Vartanian, Giant, & Passino, 2001). Differences between gay and heterosexual men's appearance conversations, however, have not been previously investigated. Thus, in this study we aimed to explore the prevalence of appearance conversations among gay and heterosexual men, and whether differences between body dissatisfaction and associated risk factors among gay and heterosexual men can be explained by differences in their appearance conversations engagement.

Differences between gay and heterosexual men's experiences of body dissatisfaction

Research suggests that body dissatisfaction is experienced differently by gay and heterosexual men. For instance, Pope and colleagues (2000) have contended that in comparison to heterosexual men, gay men experience greater levels of body dissatisfaction because of their greater deviance from hegemonic masculinity, of which heterosexuality is a key component (Connell, 1992). In support of this, a meta-analysis concluded that, on average, gay men report higher levels of body dissatisfaction than heterosexual men (Morrison et al., 2004). Subsequent studies have replicated these differences in levels of body dissatisfaction (Kaminski, Chapman, Haynes, & Own, 2005; McArdle & Hill, 2007). Furthermore, compared to heterosexual men, gay men report higher levels of unhealthy

eating attitudes and behaviours (e.g., self-induced vomiting; Conner, Johnson, & Grogan, 2004; Marino-Carper, Negy, & Tantleff-Dunn, 2010; Smith, Hawkeswood, Bodell, & Joiner, 2011).

To explain the observed differences in gay and heterosexual men's levels of body dissatisfaction it is important to examine and compare risk factors among these groups of men. One study explored whether levels of appearance orientation differed between gay and heterosexual men. Specifically, Siever (1994) found that gay men placed greater importance on their own and their partner's physical attractiveness in comparison to heterosexual men. To our knowledge no research has examined differences in the extent to which gay and heterosexual men internalize appearance ideals, a risk factor identified in previous research with men (e.g., Tylka, 2011)².

Many researchers have posited that these differences may be due to the divergent sociocultural pressures and subcultures that each group faces (Siever, 1994; Silberstein, Mishkind, Striegel-Moore, Timko, & Rodin, 1989; Yelland & Tiggemann, 2003). Some researchers have argued that the gay male subculture places a greater focus on appearance and a greater reverence of the mesomorphic ideal (e.g., by objectifying the male body more frequently in images) than the dominant heterosexual male culture (e.g., Silberstein et al., 1989). One qualitative study exploring body image with gay Australian men supports this theory. Specifically, Duncan (2007) found that many participants reported the objectification of gay men to be ubiquitous in gay-oriented media. For example, one participant said: "Every second ad had people like-half-naked and it got to the point where there was one [advertisement] that was selling gay-life insurance and it was two men in Speedos walking

² To the best of our knowledge research has also not explored whether these constructs differ between heterosexual men and men of other sexual orientations other than gay (e.g., bisexual, asexual).

down a beach” (Duncan, 2007, p. 24). A few studies have compared sociocultural appearance pressures between both groups of men (Hospers & Jansen, 2005; McArdle & Hill, 2007; Yelland & Tiggemann, 2003). These studies have found that gay men report greater appearance pressures from peers (Hospers & Jansen, 2005; McArdle & Hill, 2007), “other people” (Yelland & Tiggemann, 2003, p. 110) and the media (McArdle & Hill, 2007) than heterosexual men. In summary, it is likely that gay men experience greater levels of body dissatisfaction because they are more likely than heterosexual men to be immersed in a culture that emphasises appearance and a mesomorphic ideal that is unachievable for most.

Although research has examined the role of the media in relation to gay and heterosexual men's body image (e.g., McArdle & Hill, 2007), there has been little consideration of the way in which peer group interactions may explain differences in gay and heterosexual men's body dissatisfaction. It is possible that gay men engage in more appearance conversations than heterosexual men because of the greater focus on appearance in gay subculture. Furthermore, this greater engagement may explain the different levels of body dissatisfaction observed among gay and heterosexual men.

Appearance Conversations

Research has found that “fat talk”, one form of appearance conversation employed by girls and women that is specific to weight and shape, (e.g., “You look great, have you lost weight?”, “she's too fat to be wearing that dress”), is ubiquitous in Western societies (Nichter, 2000; Payne, Martz, Tompkins, Petroff, & Farrow, 2011). Although research suggests that fat talk may have some positive functions, including increasing social cohesion among groups and increasing an individual's likeability (Britton, Martz, Bazzini, Curtin, & LeaShomb, 2006), it also has a negative impact on health. For instance, experimental studies have found that a brief exposure to hearing another woman engaging in fat talk results in significant increases in body dissatisfaction among young women, in comparison to hearing non-appearance related or positive appearance conversations (e.g., compliments; Stice et al.,

2003; Tucker, Martz, Curtin, & Bazzini, 2007).

Although there has been much less research with men, some studies suggest that men also engage in, and are affected by, appearance conversations. Specifically, research has investigated the pressure men feel to engage in appearance conversations (Martz, Petroff, Curtin, & Bazzini, 2009; Payne et al., 2010). Between 4.0-16.2% of men reported high levels of pressure to engage in appearance conversations (Martz et al., 2009; Payne et al., 2010). Other studies have examined whether men actually engage in appearance conversations, including the frequency of peer encouragement to diet and lift weights (e.g., "You should try protein shakes to really bulk up!", Ousley, Cordero, & White, 2008, p. 76; Karazsia & Crowther, 2009, 2010), and of negative comments and appearance teasing (e.g., "Look how much weight she's gained. She looks terrible!", Ousley et al., 2008, p. 76; Galioto et al., 2012; McArdle & Hill, 2007; Vartanian et al., 2001). In these studies, men typically reported some engagement in appearance conversations (Galioto et al., 2012; Karazsia & Crowther, 2009, 2010; McArdle & Hill, 2007; Ousley et al., 2008; Vartanian et al., 2001). Moreover, engagement in appearance conversations was associated with increased levels of general appearance- (McArdle & Hill, 2007; Vartanian et al., 2001) and muscularity-dissatisfaction (Galioto et al., 2012; Karazsia & Crowther, 2009).

It is likely that peers are the most potent conveyor of appearance conversations among men. Firstly, fat talk among women and girls is characterized by the presence of peer groups (Nichter, 2000). Secondly, appearance conversations among peers are predictive of men's body dissatisfaction, whereas appearance conversations with other source are not (i.e. from family members; Galioto et al., 2012; Vartanian et al., 2001). To date these studies suggest that appearance conversations occur among Western men and their peers, and that appearance conversations may be an important risk factor for body dissatisfaction.

These studies, however, have limitations. First, engagement in positive appearance conversations, such as compliments, among men has not been assessed. Although seemingly

complimentary, positive appearance conversations may still endorse a narrow standard of beauty that is difficult to attain for the majority of people. Furthermore, an individual may interpret such conversations as pressure to maintain this standard of appearance. Thus positive, and negative, appearance conversations merit researcher's attention when exploring their association with body dissatisfaction. Secondly, most studies are based on a narrow population (typically undergraduate US students), with only two studies having recruited outside this group (McArdle & Hill, 2007; Payne et al., 2010). Finally, when exploring the relationship between appearance conversations and body dissatisfaction studies have either focused exclusively on dissatisfaction with general appearance or with muscularity. Given that height and body fat are known to be important to men's body satisfaction and to the ideal standard of male beauty (Rusticus, 2010; Tiggemann, Martins, & Churchett, 2008), the relationship between appearance conversations and these aspects of appearance currently remains unclear.

No studies have explicitly investigated the prevalence of appearance conversations among gay men. Given the central role of peer communication to the sociocultural environment this is an important gap in the literature. One study has looked at peer interactions in the form of appearance teasing (McArdle & Hill, 2007). The researchers found that gay men reported significantly more appearance teasing from peers than heterosexual men. Additionally, appearance teasing from peers was significantly associated with self-esteem for gay men, but not for heterosexual men. This suggests that appearance conversations with peers may be more potent for gay men and that appearance conversations warrant further investigation.

The current study

A between-subjects, cross-sectional design was employed with the following aims: to examine the prevalence of positive and negative appearance conversations among gay and heterosexual men, to explore their association with body dissatisfaction, appearance

orientation and internalization of appearance ideals among men, and to determine whether these differences between gay and heterosexual men can be explained by frequency of engagement in appearance conversations. We predicted that gay men would report more frequent engagement in appearance conversations, and higher levels of body dissatisfaction, appearance orientation and internalization of appearance ideals compared to heterosexual men. We also hypothesized that engagement in appearance conversations would be positively correlated with body dissatisfaction, appearance orientation and internalization of appearance ideals for both groups of men. Finally, we predicted that engagement in appearance conversations would partly explain the differences in body dissatisfaction, appearance orientation and internalization of appearance ideals observed between gay and heterosexual men.

Method

Participants and Procedure

A convenience sample of gay and heterosexual British men was recruited to take part in this study. Invitations to complete a brief questionnaire about men's health were distributed, via email, through community organizations in the United Kingdom with large male memberships (e.g., Central YMCA London, the Men's Health Forum). Organizations with memberships that were likely to include a large number of gay men also were purposefully approached in order to gain two equivalently sized samples of gay and heterosexual participants; these included the University of Bath Lesbian Gay Bisexual Transsexual (LGBT) Society and Pride Bristol. In addition, similarly worded invitations to complete the questionnaire were posted on Internet forums that accepted the invitations (e.g., UK Skateboarders forum, Psychology Research Online) and social networking websites (e.g., Facebook, Twitter). Finally, printed flyers inviting men to participate were distributed at two LGBT community events in south west England. Ethics approval for this research was granted by ethics committees at the University of Bath and the University of the West of

England.

A total of 349 men accessed the online questionnaire and consented to take part in the study. Of these men, 149 (42.7%) were removed from the final sample as they completed less than 50% of the questionnaire. Due to inadequate power to explore differences between men identifying with other sexual orientations, we also excluded 31 men who did not identify as gay or heterosexual. The final sample consisted of 155 men, aged 18-69 years ($M = 28.83$, $SD = 9.93$), with 49.7% self-identifying as gay and 50.3% as heterosexual. The sample was primarily White British (76.1%), with smaller numbers of participants identifying as "White Other" (10.3%), "Mixed" (3.9%), "Asian or Asian British" (3.2%), "Black or Black British" (1.2%), "Chinese" (.6%) and "Other" (4.5%). The majority of participants were in employment (69%, 28% students, 3% unemployed) and were within the healthy weight body mass index (BMI) range (69.6%; $M = 24.47$, $SD = 4.81$).

After logging on to the questionnaire website and providing consent, participants were asked to complete the measures outlined below, followed by demographic questions about their age, height, weight, sexual orientation, employment status and ethnicity. Upon completion of the study, participants were offered the chance to enter a prize draw for a £20 Amazon gift voucher.

Measures

Male Body Attitudes Scale-Revised (MBAS-R; Ryan, Morrison, Roddy, & McCutcheon, 2011). The MBAS-R is a 15-item measure that assesses men's body fat dissatisfaction (5 items; e.g., "*I feel excessively fat*"), height dissatisfaction (3 items; e.g., "*I wish I were taller*") and muscularity dissatisfaction (7 items; e.g., "*I think my legs are not muscular enough*"). Responses are rated on a 5-point Likert scale from 1 (*rarely*) to 5 (*always*). Mean scores were calculated for each subscale with higher scores indicating greater levels of dissatisfaction. In the current study, reliability for the muscularity, height, and body fat dissatisfaction subscales was good (Cronbach's $\alpha = .85; .78; .94$).

Appearance Orientation subscale of the Multidimensional Body Self Relations

Questionnaire (Cash & Pruzinsky, 1990). The Appearance Orientation subscale assesses the degree of importance that individuals place on their appearance. The subscale consists of 12 items (e.g., "*It is important that I always look good*") with a 5-point Likert response scale from 1 (*strongly disagree*) to 5 (*strongly agree*). A mean score was calculated with higher scores indicating greater appearance orientation. Reliability in the current sample was good (Cronbach's $\alpha = .90$).

Internalization-General and the Internalization-Athlete subscales of the

Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3; Thompson, Van Den Berg, Roehrig, Guarda, & Heinberg, 2004). The Internalization-General subscale assesses internalization of the general appearance ideal (9 items; e.g., "*I compare my body to the bodies of people who are on TV*"), whereas the Internalization-Athlete subscale assessed internalization of the athletic appearance ideal (5 items; e.g., "*I compare my body to that of people in 'good shape'*"). Responses are made on a 5-point Likert scale from 1 (*definitely disagree*) to 5 (*definitely agree*). Mean scores were calculated for each subscale, with higher scores indicating greater levels of general- and athletic- internalization. Reliability for both subscales in the current study was good (Cronbach's $\alpha = .93; .82$).

Frequency of appearance conversation engagement. When this study was designed, and at the time of writing this paper, there was no established, validated measure of men's engagement in appearance conversations. Therefore a new measure assessing men's appearance conversation was created for the purpose of this study. The construction of this measure was based upon an established measure of women's appearance conversation, the Frequency of Fat Talk Scale (Salk & Engeln-Maddox, 2011). The design was also carried out in consultation with three research psychologists expert in men's body image and appearance psychology, who were based at the Centre for Appearance Research, at the University of the West of England. Participants were provided with the following definition for positive

appearance conversations: *“When you or others discuss parts of your body that you’re happy with, or point out a part of somebody’s body that you admire. For example, ‘I’m lucky I’ve got good genes. Its great being 6ft!’ and ‘Mate, your arms are huge! The gym is really paying off for you”*. Participants also were provided with the following definition for negative appearance conversations: *“When you or others discuss parts of your body that you’re not happy with, or point out a part of somebody’s body that might be ‘flawed’. For example, ‘Man, I need to go to the gym more, my biceps are pathetic!’ and ‘Alright mate, how’s that beer belly coming?”*. After each definition, participants were asked to rate separately how often they engage in positive and negative appearance conversations on a 5 point Likert response scale from 1 (*it’s extremely rare*) to 5 (*it’s extremely common*). Higher scores indicated more frequent engagement in positive and negative appearance conversations.

Body Mass Index. Self-reported height and weight measurements were requested at the end of the questionnaire, as requesting this information can increase body dissatisfaction among some participants (Hrabosky et al., 2009). BMI was calculated by dividing weight (kilograms) by height² (meters).

Results

Data Screening

This study employed an online questionnaire, whereby a response was registered each time the first screen of the study (which only included information about the study to allow for informed consent and no measures) was viewed. Exiting the study involved simple closing the internet browser window at any stage of the questionnaire. It was therefore expected that some participants would exit the questionnaire before completing any of the measures and/or a meaningful portion of the questionnaire. As a result, and in accordance with the recommendation by Hair, Black, Babin, Anderson and Tatham (2006), participants who completed less than 50% of the questionnaire were removed prior to analysis. From the remaining participants’ data, missing value analysis revealed 9.48% of data missing at

random (MCAR; $\chi^2(89) = 96.643, p = .27$). In accordance with Tabachnick and Fidell (2007) multiple imputation and pairwise deletion methods were administered and the results of MANCOVA analyses were compared to determine if the missingness solution affected the outcome of the results. No differences were found between the solutions. For simplicity, pairwise deletion was employed in the final analyses. Age and height dissatisfaction subscale scores were skewed significantly and there were univariate outliers on these measures. Logarithmic transformations were performed on these variables across the analyses to improve normality.

Demographic equivalence of gay and heterosexual sample

Independent t-tests indicated no significant differences in BMI ($t(133.32) = 1.82, p = .07$) and education ($t(151) = -.25, p = .98$) between gay and heterosexual men in the final sample. However, gay men were, on average, older ($M = 32.57, SD = 11.24$) than heterosexual men ($M = 25.30, SD = 6.93; t(115.41) = 4.62, p < .001$). Consequently, age was controlled for in all analyses. Finally, a multidimensional chi-square test revealed no significant difference in ethnicity between the gay and heterosexual samples ($\chi^2(1) = .456, p = .50$).

The prevalence of appearance conversations among men

Table 1 displays percentages for the frequencies at which men reported engaging in positive and negative appearance conversations. Over half of participants rated engagement at and above the midpoint of the scale (i.e. between 3 and 5), for both positive (55.5%) and negative (52.7%) appearance conversations, indicating these conversations exist for the majority of men.

Comparisons between gay and heterosexual men

Multivariate analyses of covariance (MANCOVA) were carried out to determine if gay and heterosexual men differed in (1) levels of body fat-, height- and muscularity-dissatisfaction, (2) levels of appearance orientation and internalization of appearance ideals

and (3) the frequency at which they engage in positive and negative appearance conversations after controlling for age.

Body dissatisfaction. The MANCOVA on measures of body fat-, height- and muscularity- dissatisfaction indicated a significant multivariate effect ($F(3,129) = 5.07, p = .002$, partial $\eta^2 = .11$) after controlling for age ($p = .001$). There were also significant univariate effects for sexuality on body fat- ($F(1,131) = 6.34, p = .013$, partial $\eta^2 = .046$) and muscularity- ($F(1,131) = 12.99, p < .001$, partial $\eta^2 = .090$) dissatisfaction. Specifically, as predicted, gay men reported greater levels of dissatisfaction with their body fat and muscularity in comparison to heterosexual men. However, there was no significant univariate effect for sexuality on height dissatisfaction ($F(1,131) = .001, p = .975$, partial $\eta^2 = .00$), indicating that gay and heterosexual men did not differ in their levels of dissatisfaction with height.

Appearance orientation and internalization of appearance ideals. The MANCOVA indicated a significant multivariate effect ($F(3,128) = 5.66, p = .001$, partial $\eta^2 = .12$) after controlling for age ($p = .07$). There were also significant univariate effects for sexuality on appearance orientation ($F(1,130) = 15.14, p < .001$, partial $\eta^2 = .104$)³ and general-internalization ($F(1,131) = 6.71, p = .011$, partial $\eta^2 = .049$). As predicted, gay men reported higher levels of appearance orientation and internalization of the general appearance ideal than heterosexual men. In contrast to predictions, gay men did not report greater levels of internalization of the athletic appearance ideal in comparison to heterosexual men ($F(1,130) = .81, p = .37$, partial $\eta^2 = .006$).

Appearance conversations. The MANCOVA on positive and negative appearance

³ As Levene's test was significant for appearance orientation ($F(1,131) = 5.64, p = .02$) the assumption of equality of variance was violated. Thus, a more conservative alpha level ($p = .025$) was used in interpretation (as recommended by Tabachnick & Fidell, 2006).

conversation measures revealed a significant multivariate effect ($F(2,127) = 5.82, p = .004$, partial $\eta^2 = .08$) after controlling for age ($p = .30$). There also were significant univariate effects for sexuality on positive appearance conversations ($F(1,128) = 8.38, p = .004$, partial $\eta^2 = .06$) and negative appearance conversations ($F(1,128) = 4.29, p = .040$, partial $\eta^2 = .03$). As predicted, gay men were more likely to report that they engage in positive and negative appearance conversations than heterosexual men.

Relationship between appearance conversations and body dissatisfaction, appearance orientation and internalization of appearance ideals.

To explore the relationship between frequency of engagement in positive and negative appearance conversations and body dissatisfaction, appearance orientation and internalization of appearance ideals, Pearson correlations were examined for gay and heterosexual men separately (see Table 3). For gay men, the extent to which they engaged in positive appearance conversations was not correlated with any of the other variables. However, there were significant positive correlations between frequency of engagement in negative conversations and both body fat dissatisfaction and general-internalization for gay men.

For heterosexual men, the extent to which they engage in positive appearance conversations was positively correlated with body fat dissatisfaction, muscularity dissatisfaction, appearance orientation, general-internalization, athletic-internalization and engagement in negative appearance conversations. Likewise, heterosexual men's engagement in negative appearance conversations was positively correlated with body fat dissatisfaction, height dissatisfaction, muscularity dissatisfaction, general-internalization, athletic-internalization and engagement in positive appearance conversations.

Appearance conversations as a potential mediator of sexuality differences

In accordance with Preacher and Hayes (2008), bootstrapping mediation analyses were conducted to establish whether frequency of engaging in appearance conversations mediated the relationship between sexuality and body fat- and muscularity- dissatisfaction,

appearance orientation and general-internalization found in the previous MANCOVAs. Bootstrapping represents a superior mediational analysis in comparison to Baron & Kenny's (1986) causal step approach as it does not require the assumption of multivariate normality and it is able to control for a covariate in analyses (Preacher & Hayes, 2008). The criterion for establishing mediation is different to the causal step approach as bootstrapping does not require the direct relationship between the independent and outcome variable(s) to be significant. It also tests mediation of the total model, as well as the proposed individual mediators (Preacher & Hayes, 2008).

Mediation models were run separately for each of the four dependant variables. In each model, age was entered as a covariate, sexuality as a predictor variable, positive and negative appearance conversations as proposed mediators and body fat dissatisfaction, muscularity dissatisfaction, appearance orientation or general-internalization entered as the dependant variable. To determine if each mediator uniquely accounted for the effects of sexuality on each of the dependent variables, analyses using 5000 bootstrap samples with bias-corrected confidence estimates were conducted⁴. Descriptive and inferential statistics are presented in Table 4.

In the first model examining body fat dissatisfaction ($N = 131$), after controlling for age ($p = .003$), the total direct effect of sexuality became non-significant when the mediators were included in the model. Whereas the indirect effect of positive appearance conversations was not significant, the indirect effect for negative appearance conversations was significant. This indicates that positive appearance conversations did not mediate the relationship between sexuality and body fat dissatisfaction. In contrast, negative appearance conversations fully mediated this relationship. In other words, gay men's more frequent engagement in

⁴ A series of contrasts were conducted and revealed no significant differences between the mediators in each model ($p > 0.5$).

negative appearance conversations fully explained the differences observed in gay and heterosexual men's levels of body fat dissatisfaction.

In the second model examining muscularity dissatisfaction ($N = 131$), after controlling for age ($p = .134$) the total direct effect of sexuality on muscularity dissatisfaction remained significant when the mediators were included in the model. However, the indirect effects of both positive and negative appearance conversations were significant. This suggests that positive appearance conversations and negative appearance conversions partially mediated the relationship between sexuality and muscularity dissatisfaction. Thus, gay men's more frequent engagement in both positive and negative appearance conversations partially explained the differences observed in gay and heterosexual men's levels of muscularity dissatisfaction.

In the third model examining appearance orientation ($N = 130$), after controlling for age ($p = .406$) the total direct effect of sexuality remained significant when the mediators were included in the model. Neither of the indirect effects for positive or negative appearance conversations were significant. Therefore, positive and negative appearance conversations did not mediate the relationship between sexuality and appearance orientation.

In the final model examining general-internalization ($N = 131$), after controlling for age ($p = .031$) the total direct effect of sexuality became non-significant when the mediators were included in the model. Both of the indirect effects for positive or negative appearance conversations were significant. Therefore, gay men's more frequent engagement in both positive and negative appearance conversations fully explained the differences observed in gay and heterosexual men's levels of internalization of the general appearance ideal.

Discussion

The results of this study suggest that appearance conversations are a prevalent discourse in the lives of adult men. Over half of participants (55.5% positive, 52.7% negative) rated engagement of positive and negative appearance conversations at or above the midpoint

of the Likert response scale. Our findings concur with other studies reporting appearance conversations among men (Galioto et al., 2012; Ousley et al., 2008). Additionally, as the majority of participants in this study were not students (72%) and were recruited from the UK, our research suggests that appearance conversations are not limited to male students from the US. The frequency of men's engagement in appearance conversations in this study was, however, higher ($M_{pos}^5 = 2.70$ and $M_{neg} = 2.63$ on a 5-point scale) than in other studies using equivalent scales (e.g., $M_{neg} = 1.84$, McArdle & Hill, 2007; $M_{neg} = 2.01$, Vartanian et al., 2001). This could be because our measure of appearance conversations may have been more sensitive to capturing men's engagement in appearance conversations. Our measure assessed both positive and negative appearance conversations and the appearance conversation examples that were given reflected a greater breadth of men's appearance concerns than those used in previous measures (i.e., body fat, muscularity, and height dissatisfaction). In contrast, the previous assessments of appearance conversations among men have tended to ignore positive appearance conversations (Galioto et al., 2012; McArdle & Hill, 2007) or have given examples of such appearance conversations based on only one facet of men's body dissatisfaction (Martz et al., 2009; Payne et al., 2010). Nevertheless, the high frequency of engagement in appearance conversations found in this study resonates with other research that has shown that there is a greater sociocultural focus on the male body now than ever before (e.g., Law & Labre, 2002).

Consistent with hypotheses and previous research (e.g., Siever, 1994; Smith et al., 2011), gay men reported greater body fat- and muscularity- dissatisfaction, appearance orientation, general internalization and engagement in both positive and negative appearance conversations than heterosexual men. Furthermore, the majority of these differences were

⁵ M_{pos} = refers to mean frequency scores of positive appearance conversation engagement.

M_{neg} = refers to mean frequency scores of negative appearance conversation engagement.

explained by the extent to which gay and heterosexual men engaged in appearance conversations. Specifically, differences between gay and heterosexual men's reports of body fat dissatisfaction, muscularity dissatisfaction, and general-internalization were mediated by frequency of engagement in appearance conversations. As these data are cross-sectional it is impossible to draw conclusions about causality. Theoretically it is plausible, however, that engagement in appearance conversations may cause body dissatisfaction and internalization of the general appearance ideal. Moreover, as gay men engage in appearance conversations to a greater extent than heterosexual men, they may also develop greater levels of body dissatisfaction and internalization of the general appearance ideal. This interpretation suggests that appearance conversations foster the dissatisfaction and internalization, and is supported by experimental evidence which has shown that fat talk can cause body dissatisfaction among women (Stice et al., 2003). However, it is also possible that different levels of body dissatisfaction and internalization of the general appearance ideal among gay and heterosexual men drive differences in frequency of engaging in appearance conversations. Future research needs to address the causal direction of these associations.

Interestingly positive and negative appearance conversations were both mediators of differences between gay and heterosexual men's muscularity dissatisfaction and general-internalization. In contrast, only negative appearance conversations mediated gay and heterosexual men's body fat dissatisfaction differences. In addition, negative appearance conversations were clearly more potent for gay men (with regard to their significant correlations to other study variables) than positive appearance conversations. For heterosexual men, both positive and negative appearance conversations were associated with body dissatisfaction and associated risk factors. Therefore, for heterosexual men any conversation about appearance appears to be associated with negative outcomes. It may be that such conversations make cultural appearance ideals and their appearance more broadly salient to heterosexual men, leading to unfavourable evaluations of their own appearance and

body dissatisfaction. Gay men, however, appear to be able to engage in conversations about appearance without associated negative effects, as long as the conversations are positively framed. If appearance is more central for gay men, these conversations may not change the level of appearance focus and therefore they are not associated with changes in body satisfaction. This is just one possible explanation for these findings; future research exploring differences in appearance conversations between heterosexual men and gay men is needed to clarify the nature and causes of such differences.

Although we found that gay and heterosexual men differed on the majority of study variables as predicted, two of the hypothesised differences for height dissatisfaction and athletic-internalization were not supported. It could be that there were no significant differences on height dissatisfaction because height is a less important aspect of appearance for gay men (Tiggemann, Martins & Kirkbride, 2007) and therefore, their relatively high dissatisfaction on other appearance aspects does not apply to height. In addition, the finding that gay and heterosexual men did not differ on athletic-internalization was unexpected. It may be that heterosexual men more strongly internalize this ideal as idolization of an athletic body is congruent with dominant notions of hegemonic masculinity (the competitive athlete being a virulent symbol of masculinity).

It is important to acknowledge that there are some limitations to this study. As already noted, the cross-sectional, correlational design of this study negates inferring causality. Future research could address this through experimental designs, for example by replicating earlier fat talk research (e.g., Stice et al., 2003) with men, and through longitudinal research. This research recruited a more diverse sample than previous studies in this area; nonetheless there is a continuing need to expand our samples to include diverse ethnic and sexual identity groups, those who are differently abled, as well as older men. This is particularly important as differences have been found between marginalized groups and young, white, able-bodied and heterosexual participants with regards to body image (Ryan, Morrison, & McDermott, 2010;

Stevens, Kumanyika, & Keil, 1994). Additionally, qualitative research on appearance conversations will be beneficial in providing a deeper understanding of men's appearance conversations and the contexts that surrounds these. Finally, the measure of men's appearance conversation engagement used in this study has not been rigorously validated. Although it was constructed based upon an established measure of women's appearance conversations (FFTS, Salk & Engeln-Maddox, 2010) and in consultation with psychologists expert in men's body image, it presents a limitation in the current study. Going forward, it is important that future research focuses on the development and validation of suitable measures of men's appearance conversations to facilitate ongoing research and comparisons between studies on this topic.

The finding that appearance conversations are related to body dissatisfaction and other associated constructs for both gay and heterosexual men has several implications. Firstly, body dissatisfaction interventions and advocacy activities that address fat talk among women and girls might usefully be adapted to address appearance conversations among men and boys (e.g., body image interventions in schools and universities, and community activism events like "Fat Talk Free[®] Week"). Additionally, men's health professionals and therapists should be aware of the potential role of appearance conversations in shaping men's body dissatisfaction and associated health outcomes. More broadly, these findings suggest that there is a continuing need for researchers and practitioners to develop effective strategies to reduce sociocultural appearance-related pressures within heterosexual and gay male culture.

Conclusion

To our knowledge, this is the first investigation into both positive and negative appearance conversations among gay and heterosexual men. The results indicate that appearance conversations are an important sociocultural influence on men's body dissatisfaction. In addition, they appear to be key to explaining the differences between gay and heterosexual men's body dissatisfaction. Our findings suggest that further research into

the prevalence and nature of appearance conversations among men is warranted, and that there is empirical evidence to support the need for health professionals and practitioners to address appearance conversations within body image interventions targeting men.

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Table 1

Frequency of engagement in positive and negative appearance conversations

	Full Sample (%)	Gay (%)	Heterosexual (%)
Likert scale response			
Positive appearance conversations	<i>N</i> = 153	<i>N</i> = 75	<i>N</i> = 78
It's extremely rare = 1	19.0	13.3	24.4
= 2	25.5	20.0	30.8
= 3	30.7	33.3	28.2
= 4	16.3	20.0	12.8
It's extremely common = 5	8.5	13.3	3.8
Negative appearance conversations	<i>N</i> = 150	<i>N</i> = 73	<i>N</i> = 77
It's extremely rare = 1	18.0	12.3	23.4
= 2	29.3	30.1	28.6
= 3	30.0	31.5	28.6
= 4	16.7	17.8	15.6
It's extremely common = 5	6.0	8.2	3.9

Table 2

Descriptive and inferential statistics demonstrating the significant differences in appearance conversations and related constructs between gay and heterosexual men whilst controlling for age

	Gay men	Confidence Intervals		Heterosexual men	Confidence Intervals		Significance		partial η^2
	Mean (SD)	Lower	Upper	Mean (SD)	Lower	Upper	F value (df)	p	
Body fat dissatisfaction	3.01(.15)	2.71	3.31	2.70(.15)	2.18	2.75	6.34(1,131)	.013*	.05
Height dissatisfaction ^a	2.13(.12)	2.83	3.22	2.13(.11)	2.32	2.70	.002(1,131)	.97	< .01
Muscularity dissatisfaction	3.03(.10)	2.83	3.23	2.51(.10)	2.32	2.70	12.99(1,131)	< .001***	.09
Appearance orientation	3.56(.10)	3.37	3.76	3.01(.10)	2.82	3.20	15.14(1,130)	< .001***	.10
General-internalization	3.05(.12)	2.81	3.30	2.59(.12)	2.36	2.83	7.06(1,130)	.009**	.05
Athletic-internalization	3.22(.12)	2.99	3.45	3.07(.11)	2.85	3.29	.81(1,130)	.37	< .01
Positive AC ^b	3.05(.16)	2.75	3.36	2.41(.15)	2.11	2.70	8.38(1,128)	.004*	.06
Negative AC ^b	2.93(.15)	2.63	3.23	2.48(.15)	2.19	2.77	4.29(1,128)	.040*	.03

Note: ^a Non-transformed descriptive data for height dissatisfaction is reported for ease of interpretation. ^b AC = appearance conversations.

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

Table 3

Means, standard deviations and correlations for each variable for gay and heterosexual men.

Variable		<i>M</i>	<i>SD</i>	<i>N</i>	1	2	3	4	5	6	7	8	9	10
Gay	1. BMI									-		-		
men		25.12	5.25	77	1.00	.50**	.43**	-.02	-.24*	.28**	-.23*	.28**	-.04	-.16
	2. Age ^a	32.57	11.24	65		1.00	.31**	-.13	-.13	-.16	-.23*	-.13	.10	-.09
	3. Body fat dissatisfaction	3.06	1.24	77			1.00	.36**	.05	.13	.35**	.14	-.03	.40**
	4. Height dissatisfaction ^a	2.08	.96	77				1.00	.30**	.10	.35**	.14	.07	.19
	5. Muscularity dissatisfaction	2.96	.76	77					1.00	.30**	.50**	.56**	.03	.07
	6. Appearance orientation	3.54	.88	75						1.00	.60**	.47**	-.03	.09
	7. General-internalization	2.98	.97	77							1.00	.57**	-.01	.24*
	8. Athletic-internalization	3.16	.92	77								1.00	.16	.05
	9. Positive AC ^b	3.00	1.22	75									1.00	-.10
	10. Negative AC ^b	2.79	1.13	73										1.00
Heteros	1. BMI	23.79	4.23	73	1.00	.28*	.40**	.19	-.06	.14	.04	.00	.13	.14
exual	2. Age ^a	25.30	6.93	69		1.00	.06	-.01	-.24*	-.06	-.25*	-.06	-.23*	-.15

men	3. Body fat dissatisfaction	2.37	1.10	78	1.00	.21*	.49**	.32**	.28**	.08	.22*	.24*
	4. Height dissatisfaction ^a	2.16	.83	78		1.00	.11	.26*	.22*	.10	.18	.30**
	5. Muscularity dissatisfaction	2.59	.79	78			1.00	.24*	.42**	.26*	.36**	.26*
	6. Appearance orientation	3.06	.66	78				1.00	.52**	.38**	.37**	.12
	7. General-internalization	2.66	.91	78					1.00	.67**	.56**	.28**
	8. Athletic-internalization	3.09	.90	78						1.00	.48**	.33**
	9. Positive AC ^b	2.41	1.11	78							1.00	.33**
	10. Negative AC ^b	2.48	1.13	77								1.00

Note: ^a Non-transformed descriptive data for height dissatisfaction is reported for ease of interpretation. ^b AC = appearance conversations.

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

Table 4

Mediation of the effect of sexuality on body dissatisfaction facets, general-internalization and appearance orientation through positive and negative appearance conversation engagement.

		Coefficient	SE	T/F value	p	Bootstrapping			
						BC CI ^a (.95)		BCa CI ^a (.95)	
						Lower	Upper	Lower	Upper
Body fat dissatisfaction	Total effect	-.27	.11	2.47	.015*				
	Direct effect	-.18	.11	-1.62	.108				
	Indirect effect	-.10	.05	9.46	< .001***	-.22	-.01	-.21	-.01
	Positive AC ^b	-.02	.03	~	>.05	-.10	.03	-.10	.03
	Negative AC ^b	-.08	.04	~	< .05*	-.18	-.01	-.18	-.01
a = R ² = .23, Adj R ² = .21 F(4,126) = 9.46, p < .001***									
Muscularity dissatisfaction	Total effect	-.26	.07	-3.61	< .001***				
	Direct effect	-.19	.07	-2.63	< .001***				
	Indirect effect	-.07	.03	6.29	< .001***	-.14	-.02	-.14	-.02
	Positive AC ^b	-.04	.02	~	< .05*	-.10	-.01	-.10	< .01

Negative AC^b -.03 .02 ~ < .05* -.08 < -.01 -.08 < -.01

$c = R^2 = .167$, $\text{Adj } R^2 = .140$ $F(4,126) = 6.294$, $p < .001^{***}$

Appearance orientation	Total effect	.557	.143	3.91	< .001***				
	Direct effect	.464	.147	3.15	.002**				
	Indirect effect	.094	.053	5.16	< .001***	< .01	.22	< .01	.22
	Positive AC ^b	.060	.047	~	> .05	< -.01	.19	< .01	.19
	Negative AC ^b	.034	.041	~	> .05	-.02	.17	-.017	.16

$c = R^2 = .14$, $\text{Adj } R^2 = .11$ $F(4,125) = 5.16$, $p < .001^{***}$

General-internalization	Total effect	.45	.17	2.57	.011*				
	Direct effect	.24	.173	1.39	.168				
	Indirect effect	.213	.079	7.33	< .001***	.08	.40	.08	.41
	Positive AC ^b	.122	.064	~	< .05*	.03	.30	.03	.30
	Negative AC ^b	.091	.059	~	< .05*	< .01	.25	< .01	.25

$c = R^2 = .19$, $\text{Adj } R^2 = .16$ $F(4,126) = 7.33$, $p < .001^{***}$

Note. ^aBias-corrected and accelerated bootstrap confidence intervals. ^bAC = appearance conversations. * $p < .05$ **. $p < .01$. *** $p < .001$