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Associations Among Men's Sexist Attitudes, Objectification of Women, and Their Own Drive for Muscularity

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The present study tested the hypothesis, derived from feminist perspectives on body image, that men's greater endorsement of sexist attitudes and objectification of women would be associated with their own drive for muscularity. A total of 327 British men completed scales measuring their drive for muscularity, sexist attitudes, hostility toward women, objectification of women, and key demographics. Results showed that greater drive for muscularity was significantly predicted by stronger objectification of women, hostility toward women, and sexist attitudes, once men's age and body mass index had been taken into account. These results suggest that oppressive beliefs held by men are associated with a desire for a more muscular physique. Implications for theoretical models seeking to explain drive for muscularity among men are discussed in conclusion.

Keywords: drive for muscularity, body image, oppressive beliefs, sexism, objectification

Scholars have focused an increasing amount of attention on negative body image because of its associations with a range of physical and psychological health problems (e.g., Cash, 2004; Grogan, 2006). Importantly, the available evidence suggests that the percentage of men who are dissatisfied with their bodies has increased over the last several decades (e.g., Gray & Ginsberg, 2007; Keel, Baxter, Heatherton, & Joiner, 2007; J. K. Thompson & Cafri, 2007). Unlike women worldwide who typically desire a thinner body (e.g., Swami, Frederick, et al., 2010), men appear to idealize and desire a muscular physique accompanied by minimal body fat (Cohane & Pope, 2001; McCreary, 2007; Olivardia, Pope, Borowiecki, & Cohane, 2004; Pope, Pope, Menard, Fay, Olivardia, & Phillips, 2005; Ricciardelli & McCabe, 2003; Swami & Tovée, 2005).

These findings have led to the suggestion that drive for muscularity—a perception of having an underdeveloped musculature combined with a desire to increase muscle mass—is a key to understanding men's body dissatisfaction (Olivardia et al., 2004; Smolak & Stein, 2006). For example, men score significantly higher on drive for muscularity than do women (Cafri & Thompson, 2004; McCreary & Saucier, 2009), and higher drive for muscularity among men is also associated with several adverse outcomes, including lower self-esteem and life satisfaction, higher rates of supplement use and exercise dependence, and greater symptoms of depression and body dysmorphic disorder (Cafri, Strauss, & Thompson, 2002; Cafri & Thompson, 2004; Chittester & Hausenblas, 2009; Hale, Roth, DeLong, & Briggs, 2010; Maida & Armstrong, 2005; McCreary & Sasse, 2000; Olivardia et al., 2004).

Although the importance of muscularity to men's body image is not in dispute, theoretical discussions of the influences that give rise to drive for muscularity have tended to focus specifically on the vulnerability of male body image to the influence of mass media (Labre, 2002; McCabe & Ricciardelli, 2004; Tiggemann, 2005). For example, experimental studies have reported that exposure to muscular and athletic male bodies (Aglia & Tantleff-Dunn,

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2004; Leit, Gray, & Pope, 2002), and male-oriented media (Giles & Close, 2008) can result in body dissatisfaction among men, although effects may not be as large as they are for female participants. In addition, scholars have also highlighted the increasing objectification of the male body in contemporary Western mass media as a potential cause for male body dissatisfaction (e.g., Aubrey, 2006; Swami, 2007).

To our knowledge, however, scholars have not approached the topic of men's body image from feminist perspectives, which posit that corporeal experiences are shaped, in part at least, by patriarchal structures in society, gendered identities, and power relationships between women and men (e.g., Bartky, 1990; Bordo, 1993; Dworkin, 1974; Jeffreys, 2005; Smolak & Murnen, 2007; Wolf, 1990). An important contribution to this literature is the "beauty-ideals-are-oppressive" hypothesis (Forbes, Collinsworth, Jobe, Braun, & Wise, 2007), which is focused on the individual difference factors that are associated with oppressive beliefs on the one hand and negative outcomes of those beliefs on the other. In support of this perspective, recent work has reported significant associations between oppressive beliefs, operationalized as sexist attitudes and objectification of others, and a range of beauty ideals and practices among women (Forbes et al., 2007; Swami, Coles, Salem, Wilson, Wyrozumska, & Furnham, 2010).

To date, these studies have focused on the negative impact of patriarchy on the corporeal experiences of women, but it is quite likely that internalizing patriarchal ideas connected to sexism and objectification of women will also reflect men's endorsement of muscular ideals that emphasize power and masculinity. Certainly, epidemiological studies have shown that although patriarchal structures adversely impact women's well-being (e.g., Inglehart & Norris, 2003), they are also detrimental to the health status of the dominant—or hegemonic—male group (e.g., Connell, 1995; Courtenay, 2000; Kawachi, Kennedy, Gupta, & Prothrow-Stith, 1999; Stanistreet, Bambra, & Scott-Samuel, 2005). For example, one recent cross-national study suggested that as the proportion of women who are economically active in comparison with men increases, men may respond to this improved gender equality by engaging in risky

or self-destructive behaviors (Stanistreet, Swami, Pope, Bambra, & Scott-Samuel, 2007).

In addition, the available evidence suggests that men view muscular physiques as being masculine and that slender men are perceived as being feminine (Grogan & Richards, 2002; Powlishta, Watterson, Blashill, & Kinnucan, 2008). There is further evidence to suggest that men who adopt more masculine gender roles and stereotypical male behaviors experience greater drive for muscularity (Mahalik et al., 2003; McCreary, Saucier, & Courtenay, 2005), muscle dissatisfaction (a component of drive for muscularity; Kimmel & Mahalik, 2004, 2005), and body dissatisfaction generally (for a review, see Blashill, 2011). In short, then, it is possible that men who hold stronger patriarchal beliefs may seek to assert their masculinity by developing or aspiring to more muscular physiques. We examined this possibility in the present study by examining associations between the drive for muscularity and patriarchal constructs of sexism and a tendency to objectify women, which we briefly introduce below.

Generally speaking, sexism refers to the belief that one sex is inferior to the other and that privileges should be directed to the superior sex (Abrams, Viki, Masser, & Bohner, 2003). In patriarchal societies, the roles and privileges assigned to women are typically inferior to those assigned to men. In turn, research finds that men who hold greater sexist attitudes toward women hold more stringent beauty ideals for women (see Swami, Coles, et al., 2010). Thus, men who endorse sexist attitudes may also seek to demonstrate their masculinity by aspiring to more muscular physiques. Nevertheless, it should also be noted that there are a number of different ways in which sexist attitudes can be measured, and in the present study we followed previous work (Forbes et al., 2007; Swami, Coles, et al., 2010) in operationalizing sexism as the tendency to denigrate women through a justification of patriarchy, to maintain gendered beliefs about the roles and privileges of women and men, and to idealize women's traditional roles in society.

In addition to sexism, we also focused on participants' tendency to objectify women as a means of expressing patriarchy. In this perspective, objectification refers to the tendency to view female bodies as sexualized objects that are distinct from nonphysical competencies (see

Bartky, 1990). In patriarchal societies, it has been argued that women are reduced to the status of objects that exist for the inspection and pleasure of men, and this serves as a means of men exerting power over women (Fredrickson & Roberts, 1997). Previous work has shown that men who view objectified images of women show a greater desire to be muscular (Lavine, Sweeney, & Wagner, 1999) and experience greater hostility (Johnson, McCreary, & Mills, 2007), and that the tendency to objectify functions as a form of gendered oppression, then, it is likely that men who demonstrate a greater tendency to objectify women will also show a greater drive for muscularity.

In short, then, the present study sought to examine the relationship between men's patriarchal beliefs and their drive for muscularity. On the basis of the preceding literature review, we hypothesized that men's sexist attitudes and their tendency to objectify women would predict their drive for more muscular bodies.

Method

Participants

Participants of this study were initially 345 men recruited from the community in London, England. Of this sample, 3 men self-reported as being gay, 6 as being bisexual, and 9 preferred not to disclose their sexual orientation. Because sexual orientation may moderate the relationships between gendered attitudes and corporeal experiences (for a review, see Blashill, 2011), only data from heterosexual men were retained for analysis, leaving a final sample of 327 men. These participants ranged in age from 19 to 60 years ($M = 32.30$, $SD = 10.73$) and in self-reported body mass index (BMI) from 18.41 to 36.68 kg/m² ($M = 25.34$, $SD = 3.64$), reflecting a sample that was slightly overweight. The majority of participants self-reported as being of British White descent (88.1%), which mirrors the proportion of respondents in England describing themselves as British Whites at the time of the last census (Office for National Statistics, 2005). In terms of marital status, 38.5% of participants were single, 31.2% were in a dating relationship, 23.9% were married, and the remainder were of some other status.

Measures

Drive for Muscularity Scale (DMS; McCreary & Sasse, 2000). The DMS is a 15-item measure of the extent to which individuals desire to have a more muscular body (sample item: "I wish that I were more muscular"). Items are rated on a 6-point Likert-type scale (1 = *always*, 6 = *never*) and are reverse-coded so that higher scores represent greater drive for muscularity. Although the DMS has a two-factor, lower-order factor structure among men (representing attitudinal and behavioral dimensions), the two factors also load onto a single-order DMS factor (McCreary, Karvinen, & Davis, 2006; McCreary, Sasse, Saucier, & Dorsch, 2004; McPherson, McCarthy, McCreary, & McMillan, 2010). In the present study, therefore, we computed an overall DMS score by taking the mean of all items. McCreary (2007) reported that the one-dimensional DMS has acceptable reliability as well as good construct, concurrent, convergent, and discriminant validities. Specifically, DMS scores are higher among men than among women and are correlated with alternative measures of drive for muscularity, self-esteem, appearance orientation, and frequency of weight training. In the present study, Cronbach's alpha for the full DMS was .90.

Hostility Toward Women Scale (HTWS; Lonsway & Fitzgerald, 1995). The HTWS is a 10-item measure of explicit hostility toward women (sample item: "I feel that many times women flirt with men just to tease them or hurt them"). Items are rated on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*), and an overall HTWS score is computed by taking the mean of all 10 items following reverse coding of two items. Higher scores on this scale represent more hostile attitudes toward women. The HTWS has been shown to have acceptable reliability and good construct validity in that it was associated with adversarial sexual beliefs, tolerance of interpersonal violence, and gender role stereotyping (Lonsway & Fitzgerald, 1995), and in the present study, Cronbach's alpha for this scale was .83.

Attitudes Toward Women Scale (AWS; Spence, Helmreich, & Stapp, 1973). The AWS is a 25-item measure of blatantly sexist attitudes toward women. Although it is typically assumed to measure attitudes toward women's

right and gendered roles (Spence, 1998). E. H. Thompson, Pleck, and Ferrera (1992) have argued that it is better described as a measure of sexist attitudes about the relationships between women and men (sample item: "Intoxication among women is worse than intoxication among men"). Items on the AWS are rated on a 4-point Likert-type scale (1 = *agree strongly*, 4 = *disagree strongly*) and certain items are reverse-coded prior to computing an overall AWS score as the mean of all items. In its original form, higher scores indicate a more pro-feminist, egalitarian attitude. In the present study, however, the scores were reversed prior to analyses in order to maintain consistency with other patriarchal measures, such that higher scores reflect more sexist attitudes (see also Swami, Coles, et al., 2010). Cronbach's alpha for the AWS in the present study was .84.

Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996). The ASI is a 22-item scale that measures sexist attitudes toward women (sample item: "No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman") and in which items are rated on a 6-point, Likert-type scale (1 = *disagree strongly*, 6 = *agree strongly*). Although the ASI comprises two distinct components of sexism—namely, hostile sexism (a tendency to explicitly denigrate women) and benevolent sexism (a tendency to idealize women's traditional roles while simultaneously limiting them to subservient positions in society)—the ASI may also be used as an overall measure of sexism (Glick & Fiske, 1996). In such cases, an overall ASI score is computed by taking the mean of all items following reverse coding of certain items, such that higher scores reflect more sexist attitudes. The ASI has been shown to have good psychometric properties, including good reliability and a good pattern of validity as reflected in associations with negative attitudes and stereotypes of women (Glick & Fiske, 1996, 2001). In the present study, Cronbach's alpha for the overall ASI was .87.

Objectification of women. To measure objectification of women, the present study used a modified version of the Self-Objectification Scale (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998). In its original form, the Self-Objectification Scale requires participants to rank how important 10 body attributes are to

their physical self-concepts. In the present study, we used a modified version of the scale in which participants were asked to rank the same attributes according to how important they are when judging women. Previous studies have used a similarly modified version of the scale in which the target is other people in general rather than women specifically (Gurung & Chrouser, 2007; Strelan & Hargreaves, 2005; Swami, Coles et al., 2010). Consistent with objectification theory, these studies have reported that men objectify women more than they do other men (Strelan & Hargreaves, 2005) and that the objectification of others is associated with stronger sexist attitudes (Swami, Coles, et al., 2010). Five of the attributes are competence based (e.g., strength), and five are appearance based (e.g., weight). Each of these items is ranked on a scale ranging from 0 (*least impact*) to 9 (*greatest impact*). An overall objectification score is computed by subtracting the sum of competence-based items ($\alpha = .87$) from the sum of appearance-based items ($\alpha = .85$) (for a discussion of methodological problems with difference scores, see Edwards, 2001), with higher scores indicating greater emphasis on appearance and, by extension, objectification of women (scores ranged from -25 to $+25$). Although it is not possible to compute an overall internal reliability coefficient, Hill and Fischer (2007) posited that competence- and appearance-based sums should be negatively correlated (that is, individuals who prioritize appearance should denigrate competence). In the present study, the correlation between these sums was $-.80$, which is similar to the correlation reported by Hill and Fischer (2007).

Demographics. Participants provided their demographics, consisting of age, sexual orientation, ethnicity, marital status, height, and weight. The latter two items were used to compute participants' self-reported BMI as kg/m^2 .

Procedure

Ethical approval for this study was obtained from the relevant university ethics committee. Participants were then recruited opportunistically from various public locations, including public libraries, parks, and train stations. Recruitment was conducted by four research assistants (two men and two women; ages 19–22 years) trained in psychological methods, who

approached any men in the aforementioned catchment areas. The researchers invited potential participants to take part in a study on men's health. Participants were initially given an information sheet, which contained brief information about the survey (e.g., estimated time to complete, the nature of items, the rights of participants, and contact information of the first author). In total, 429 invitations were made (representing a response rate of 80.4%). Once participation had been agreed upon, participants provided informed consent and completed an anonymous, paper-and-pencil version of the questionnaire in a quiet location in the vicinity of their recruitment. Completed questionnaires were returned to the researchers in sealed envelopes. All participants took part on a voluntary basis and were not remunerated for participation. Once the surveys were returned, the researchers verbally debriefed participants and also provided them with contact information of the lead investigator.

Results

Descriptive statistics (means and standard deviations) for all variables included in the present study are reported in Table 1. Although there was evidence of multivariate nonnormality for the variables included in the study based on Kolmogorov–Smirnov statistics, none of the individual variables had skewness values greater than .70 or kurtosis values greater than .80. As can be seen in Table 1, the mean Drive for Muscularity Scale score was below the midpoint (i.e., 3.5 of a maximum score of 6.0) and

only half a standard deviation above the mean of a large, Scottish sample (McPherson et al., 2010). Table 1 also reports bivariate correlations between all included variables, and as shown, greater drive for muscularity was significantly correlated with greater sexism toward women (in terms of the Attitudes Toward Women Scale, the Hostility Toward Women Scale, and the Ambivalent Sexism Inventory) and greater objectification of women. Drive for muscularity was also significantly and negatively correlated with participant age and self-reported BMI. The strength of these correlations was generally moderate ($r_s = -.21$ to $.43$).

We next conducted a multiple regression (Enter method) in which drive for muscularity was the criterion variable. Each of the sexism variables (the Attitudes Toward Women Scale, the Hostility Toward Women Scale, and the Ambivalent Sexism Inventory), objectification of women, and participant age and BMI were entered simultaneously into the regression. Results showed that the regression was significant, $F(6, 320) = 25.48, p < .001, R^2 = .31$. All significance levels tests were one tailed. Of the variables entered into the model, the strongest predictor was objectification of women ($b = .45, SE = .07, \beta = .33, t = 6.47, p < .001$). Other significant predictors were sexism as measured on the Ambivalent Sexism Inventory ($b = .10, SE = .03, \beta = .16, t = 3.09, p = .001$), age ($b = -.01, SE = .01, \beta = -.15, t = -2.79, p = .003$), hostility toward women ($b = .15, SE = .06, \beta = .15, t = 2.67, p = .004$), BMI ($b = -.03, SE = .01, \beta = -.12, t = -2.30, p = .011$), and sexism as measured on

Table 1
Descriptive Statistics and Bivariate Correlations Between Drive for Muscularity, Sexist Attitudes, Other-Objectification, Self-Reported Body Mass Index, and Age

	1	2	3	4	5	6	7
1. Drive for Muscularity Scale		.30**	.25**	.31**	.43**	-.21**	-.25**
2. Hostility Toward Women Scale			.52**	.52**	.21**	-.09	-.02
3. Attitudes Toward Women Scale				.50**	.12*	-.09	-.01
4. Ambivalent Sexism Inventory					.05	-.04	-.02
5. Objectification of women						-.01	-.12*
6. Body mass index							.37**
7. Age							
<i>M</i>	2.36	3.21	2.07	3.56	10.41	25.34	32.30
<i>SD</i>	1.03	1.07	0.44	0.77	9.02	3.64	10.73

Note. $N = 327$.

* $p < .05$. ** $p < .001$, one-tailed.

the Attitudes Toward Women Scale ($b = .01$, $SE = .02$, $\beta = .08$, $t = 2.00$, $p = .026$). Thus our findings indicated that men's drive for muscularity scores were significantly predicted by men's greater tendency to objectify women and greater endorsement of sexist and hostile attitudes toward women, and by younger age and lower self-reported BMI.

Discussion

Extending the beauty-ideals-are-oppressive hypothesis (Forbes et al., 2007), the present study sought to examine whether men's oppressive beliefs directed at women would also be associated with greater drive for muscularity among themselves. The results of the present work showed that men who held more sexist attitudes and a greater tendency to objectify women reported greater drive for muscularity, even after the effects of participant age and BMI had been considered. Overall, these results provide evidence that patriarchal structures and oppressive beliefs are associated with men's body health, as has been discussed by other scholars (Connell, 1995; Courtenay, 2000; Kawachi et al., 1999; Stanistreet et al., 2005, 2007).

Our results showed that the strongest predictor of drive for muscularity among the variables included in our analysis was the objectification of women. That is, a tendency among men to more strongly objectify women appeared to be associated with a stronger drive among men to attain a muscular physique. Numerous studies have documented the negative psychological consequences of objectification for women (e.g., Fredrickson & Roberts, 1997; McKinley & Hyde, 1996; Roberts & Gettman, 2004), but the association between such objectification and drive for muscularity is less well documented. Bartky (1990, p. 26) has previously suggested that objectification is a form of gendered oppression that reduces women to "the status of mere instruments" (Bartky, 1990, p. 26) that exist for the pleasure of others. On the basis of this explanation, it may be argued that men who objectify women may also place greater emphasis on their own appearances, thereby objectifying themselves (though self-objectification as it is currently measured may not be applicable to men; Daniel & Bridges, 2010). That is, the oppressive beliefs that lead men to objectify

women may also lead to the endorsement objectified male bodily ideals that signal masculinity and power.

The present work also showed that a belief among men that women are the inferior gender is associated with men's stronger drive for muscularity. It would, therefore, appear that although sexism plays a role in the continuing oppression of women either directly or through support for feminine ideals (Forbes et al., 2007; Swami, Coles, et al., 2010), it is also associated with men's own body image. That is, greater endorsement of sexist attitudes and hostility toward women appears to be associated with the endorsement of a muscular ideal among men themselves, possibly as a means of emphasizing masculine power. These results are noteworthy because they suggest that patriarchal beliefs are not only damaging for women but may also have a negative impact on men's health, at least in terms of their body image.

Developing muscle mass may allow some men to feel more valuable or powerful, particularly in postindustrial societies in which the body remains a primary site for distinguishing gendered experiences. That is to say, faced with threats to their masculinity as a function of changing gender roles or gender relations, some men may seek to emphasize their masculinity through gaining muscle mass. In so doing, they may be seeking to differentiate themselves as much as possible from women and the latter's perceived lower status (see Connell, 1995; Courtenay, 2000). To the extent that men are unable to attain a muscular ideal, however, it may result in increased body dissatisfaction.

Nevertheless, our results should be interpreted in the light of a number of limitations of our design. First, although we recruited a community sample of men, the opportunistic nature of our recruitment means that our results should be generalized to the wider population with caution. For example, the small number of participants in the initial pool who self-reported as being either gay or bisexual suggests that there may have been sampling biases in our recruitment of participants. In addition, it is interesting that the effects of age diminished in the final regression model after the inclusion of oppressive beliefs, suggesting some mediation effects among age, oppressive beliefs, and drive for muscularity. The cross-sectional nature of our survey does not allow us to disentangle whether

effects on oppressive beliefs (and drive for muscularity itself) reflect within-person change (e.g., life span or developmental effects) or real differences between birth cohorts. In a similar vein, the correlational design of our study means that the direction of causation may be open to question and that we are not able to rule out the possibility that greater drive for muscularity results in stronger endorsement of oppressive beliefs.

In addition, we have relied on only one measure of drive for muscularity, which increases the likelihood of monomethod bias. Also, the use of rank orders for our measure of objectification of women was limited insofar as participants could not assign attributes of equal importance or insofar as the values assigned were arbitrary, particularly those in the midrange. Future work could extend the present findings in a number of ways, particularly through the inclusion of a wider array of measures that tap hegemonic masculinities, oppressive beliefs, self-objectification, or other measures of men's negative body image. It may also be important for future research to examine the extent to which patriarchal beliefs among men are associated with behavioral attempts to gain muscle mass, as opposed to attitudinal drive for muscularity. This could be achieved, for example, by examining the relationships between patriarchal beliefs and frequency and intensity of weight training or use of anabolic steroids.

With these cautions in mind, the present work suggests several implications for understanding male body image concerns. First, our work provides evidence for the continuing importance of feminist theories and perspectives to the study of men and masculinity. Specifically, hypotheses derived from feminist theories may help account for high rates of body dissatisfaction among both women and men in postindustrial societies (Forbes et al., 2007; Swami, Coles, et al., 2010). Second, the present findings may prove useful for health care practitioners and scholars with an interest in interventionist programs aimed at promoting more positive body image among men. For example, therapies that encourage the dismissal of appearance-related masculine norms may lessen drive for muscularity and thereby reduce symptoms of negative body image. Additionally, future research should investigate the extent to which the adoption of more egalitarian gender attitudes are

associated with attenuated drive for muscularity. Such a shift in attitudes holds possibilities for positive change that may help men to critically reinterpret cultural messages about masculinity and unhealthy ideals of beauty and to also join collective actions that resist attempts to disrupt corporeal satisfaction.

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