

BRIEF REPORT

Body Size Moderates the Association Between Gay Community Identification and Body Image Disturbance

David Matthew Doyle
Tulane University

Renee Engeln
Northwestern University

Researchers have suggested that sexual minority men are at increased risk for body image disturbance relative to heterosexual men because of heightened focus on appearance within the gay community. However, this research has often assumed sexual minority men endorse a monolithic body ideal, despite evidence for different ideals within the gay community. The current survey research in a community-based sample of 76 sexual minority men examined how the effect of identification with the gay community on body image varied depending upon the body type of the participant and the form of body image disturbance (i.e., desire to be smaller vs. desire for greater muscularity). For relatively heavier sexual minority men, gay community identification was associated with less body dissatisfaction but potentially more drive for muscularity. For relatively thinner sexual minority men, the pattern was reversed. The results point to a need for a more nuanced examination of the role that varying body ideals within the gay community may have on body image disturbance.

Keywords: body image disturbance, body mass index, community identification, sexual minority men

The impact of gender on body image disturbance has been well established: Women tend to suffer from greater levels of body dissatisfaction compared to men (see Calogero & Thompson, 2010). On average, men are more satisfied with how they look and are less behaviorally invested in their physical appearance than women (Muth & Cash, 1997). However, many men do suffer from body image disturbance, although their specific concerns may be different from those affecting women. Men's dissatisfaction with their bodies is more likely to be expressed through a desire to be both more muscular and lean (Olivardia, Pope, Borowiecki, & Cohane, 2004) whereas women's dissatisfaction tends to be characterized by a drive for thinness. Pope, Phillips, and Olivardia (2000) coined the term *Adonis complex* to capture the various types of body image disturbance they witnessed in men. In particular, the Adonis complex tends to refer to men's desire for the visible and sculpted type of muscularity associated with images of Adonis. In research with men from the United States, France, and Austria, men chose an ideal body 28 pounds more muscular than their current body on average (Pope et al., 2000).

Echoing these gender differences, whereas underweight women tend to be satisfied with their slim appearances, both overweight as well as underweight men report elevated dissatisfaction (Frederick,

Peplau, & Lever, 2006). Thus, unlike women, men falling at both ends of the body size spectrum evidence heightened body image disturbance (i.e., feeling either too thin or too heavy to meet the male ideal). Although research on the effects of discrepancies between actual and ideal body image among men is currently lacking, some work does suggest differential effects of feeling either too skinny or too large on men's body image outcomes. In a sample of adolescent boys, for example, dieting to lose weight was associated with higher body dissatisfaction scores but dieting to gain weight was associated with higher drive for muscularity scores (McCreary & Sasse, 2002). These data suggest that for men, the desire to be either thinner or more muscular may be associated with unhealthy eating patterns. Indeed, body dissatisfaction among men has a number of risky correlates, including low self-esteem, depression, eating disorder symptoms (Olivardia et al., 2004), and social anxiety (Cash, Theriault, & Annis, 2004).

Although women suffer from eating disorders at much higher rates than men, sexual minority men make up a disproportionate percentage of men in the United States who are diagnosed with eating disorders (e.g., Carlat, Camargo, & Herzog, 1997; but see Kane, 2010, for an alternate interpretation). Furthermore, evidence suggests that sexual minority men suffer from body image disturbance at rates significantly higher than heterosexual men and comparable to heterosexual women (e.g., Beren, Hayden, Wilfley, & Grilo, 1996; Engeln-Maddox, Miller, & Doyle, 2011; Herzog, Newman, Yeh, & Warshaw, 1992; Siever, 1994). One factor that has been implicated in the literature on body image disturbance in sexual minority men is identification with the gay community, a community that has been described as highly focused on physical appearance (Feldman & Meyer, 2007) and especially likely to

David Matthew Doyle, Department of Psychology, Tulane University; Renee Engeln, Department of Psychology, Northwestern University.

We thank Alyx Kesselring for her assistance with this research.

Correspondence concerning this article should be addressed to David Matthew Doyle, Department of Psychology, 2007 Percival Stern Hall, Tulane University, New Orleans, LA 70118. E-mail: ddoyle1@tulane.edu

endorse both a thin and muscular body ideal (Tiggemann, Martins, & Kirkbride, 2007). Thus far, research on gay community identification and body image disturbance has been inconclusive. Researchers have argued that sexual minority men with higher levels of gay community identification compare themselves more often to this culture's slim, youthful ideal and experience higher rates of eating disordered behavior (Feldman & Meyer, 2007) and greater desire for muscularity (Levesque & Vichesky, 2006). This is in contrast to research showing that for more general measures of mental health and well-being, gay community identification appears to be a protective factor (e.g., Doyle & Molix, 2014).

A weakness of the literature on sexual minority men's body image is the frequent assumption that the gay male body ideal is monolithic, despite converging lines of evidence that multiple, highly divergent body ideals can be identified within groups of sexual minority men (Bergling, 2006). Within the broader gay community, sexual minority men often tend to socialize with similar others, including those with similar body types (Forrest et al., 2014; Hennen, 2005; Willoughby et al., 2008). Although numerous different subgroups exist, two of the most prominent and widely known are *twinks* and *bears*. Although these subgroups are not entirely homogenous themselves, in general twinks tend to be younger and have smaller frames, whereas bears tend to be hairier, stockier, and more masculine acting (Waldron & Engeln-Maddox, 2011; Willoughby et al., 2008). Related to body ideals, Hennen (2005) described the bear subculture (which emphasizes a heavier ideal body size) as providing "an enticing antidote to the heart-break of a slowing metabolism" (p. 25) and a chance to reject the "body facism" (p. 27) espoused by the twink subculture (with its emphasis on extremely thin, youthful bodies). Because members of the gay community endorse various body ideals, it is possible that gay community identification may represent a risk factor for some sexual minority men and a protective factor for others. Likewise, because body image disturbance in men often involves not just a drive for thinness, but also a drive for muscularity, gay community identification may differentially impact these variables depending on the ideal toward which one is striving. For example, a heavier man could find greater acceptance within the gay community, which rewards large, hypermasculine bodies, but this focus could also trigger greater drive for muscularity. On the other hand, a man dedicated to an extremely thin body ideal may find worries about his amount of body fat exacerbated by identification with the gay community, which also stresses a very thin body ideal that is so difficult to obtain and keep. However, because of his focus on the thin, youthful body ideal, this man may be relatively free of pressures toward drive for muscularity.

Using survey methodology in a diverse, community-based sample of sexual minority men, the current study examined whether body size moderated the association between gay community identification and body image disturbance. First, we predicted that, overall, higher BMI would be associated with higher levels of fat-based body dissatisfaction and higher levels of drive for muscularity. In addition, because sexual minority men may strive toward either a slim and youthful body ideal or a heavier, hypermasculine body ideal, we predicted that body mass index (BMI) would moderate the association between gay community identification and body image disturbance. More specifically, we predicted that for very thin sexual minority men, gay community identification would act as a risk factor for fat-based body dissat-

isfaction but as a protective factor for drive for muscularity. In contrast, for heavier sexual minority men, we predicted that identification would act as a risk factor for drive for muscularity but be associated with reduced fat-focused body dissatisfaction.

Methods

Participants and Procedure

All research procedures were reviewed and approved by the local institutional review board. Informed consent was obtained and all participants were fully debriefed upon conclusion of the survey. Research assistants approached potential participants at various locations in Chicago: the Chicago Pride Parade, an elevated train stop, along a lakefront path, at a park and in the lobby of a lesbian, gay, bisexual and transgender (LGBT) community center during a LGBT-focused street fair. Participants were paid \$10 for completing anonymous surveys containing measures on a variety of topics related to objectification, body image, and sexuality. Because these data were collected as part of a larger research project on objectification theory (Engeln-Maddox et al., 2011), participants were recruited without regard to gender or sexual orientation, although all participants were over 18 years of age. In total, 76 sexual minority men participated in the current study. Men were just under 30 years old on average (ranging from 18 to 56) with a mean annual household income between \$40,000 and \$50,000. Although undergraduate students (19%) and graduate students (15%) were included in the current sample, the majority of participants were not currently students (66%). Because of a clerical error, racial/ethnic identification was not assessed in the current study. Therefore, although a relatively diverse community sample was recruited for the current study, we cannot report racial or ethnic group memberships for participants.

Participants identified their sexual orientation via a 7-point, single-item measure of sexual orientation (Kinsey, Pomeroy, & Martin, 1948), with responses ranging from 0 (*exclusively heterosexual with no homosexual contact*) to 6 (*exclusively homosexual with no heterosexual contact*). Consistent with research on the varieties of sexual minority identities (Savin-Williams & Vrangalova, 2013), all men selecting scale points greater than 1 (*predominantly heterosexual, only incidentally homosexual contact*) were included in the current study. Of note, men who selected 2 (*predominantly heterosexual, but more than incidentally homosexual contact*), 3 (*equally heterosexual and homosexual contact*), or 4 (*predominantly homosexual, but more than incidentally heterosexual contact*) on this scale (sometimes used to identify bisexual men) did not differ from men who selected 5 (*predominantly homosexual, only incidentally heterosexual contact*) or 6 (*exclusively homosexual with no heterosexual contact*) in mean level of gay community identification, $t(70) = .47, p = .64$.

Measures

Body dissatisfaction. The Body Dissatisfaction subscale of the Eating Disorders Inventory-2 (Garner, 1991) measures participants' dissatisfaction with the overall size and shape of regions of the body. Participants respond to nine items assessing how often they feel various body areas are too large on a scale ranging from 1 (*always*) to 6 (*never*). After reverse scoring appropriate items,

participants were assigned 0 points for each item to which they responded *sometimes*, *rarely*, or *never*; 1 point for *often*, 2 points for *usually*, and 3 points for *always* (following the scoring recommended by Garner, Olmstead, & Polivy, 1983, and Garner & Garfinkel, 1979), with high scores indicating greater dissatisfaction. This measure assesses feelings of fatness rather than worries over lack of muscularity (e.g., "I think that my stomach is too big"). Initial validity evidence for the EDI (and this subscale specifically) was based on several large samples of patient and nonpatient adolescents and adults (Garner, 1991). Scores on this scale are positively correlated with other measures of body dissatisfaction and eating disorder symptoms (Garner, 1991; Spillane, Boerner, Anderson, & Smith, 2004). Gay men tend to score higher than heterosexual men on this subscale (Yelland & Tiggemann, 2003). Though this scale has been used more frequently with women, psychometric analyses reveal factor invariance across gender and similar invariant correlations with related measures across gender (Spillane et al., 2004), suggesting it is an appropriate measure to use with samples comprising men. Cronbach's alpha was .84 in the current sample.

Drive for muscularity. The Drive for Muscularity Scale (McCreary & Sasse, 2000) is a 15-item measure of attitudes and behaviors related to the motivation to increase one's muscularity (e.g., *I think I would look better if I gained 10 pounds in bulk*). The response scale was identical to that of the body dissatisfaction scale described above; total scores are the mean of responses to all items after reverse scoring appropriate items. The Drive for Muscularity Scale has been identified as a highly effective measure of male body image (Cafri & Thompson, 2004). Among samples of adolescent boys, scores on this measure were associated with dieting to gain weight (McCreary & Sasse, 2002), low self-esteem and depression (McCreary & Sasse, 2000). An alpha of .91 was found for a sample of college men (Davis, Karvinen, & McCreary, 2005) and .89 for a sample of men ranging in age from 18–64 (Sladek, Engeln, & Miller, 2014). Cronbach's alpha in the current sample was .86.

Gay community identification. This seven-item scale (Tiggemann et al., 2007) assesses overall amounts of contact with the gay community (e.g., *I am actively involved in the gay and lesbian community*). Responses are made on a scale ranging from 1 (*not at all true of me*) to 7 (*extremely true of me*), with higher scores indicating greater identification with the gay community. Though little validity evidence is available for this scale, in a sample of 253 adult men, scores were not associated with self-esteem or age (Tiggemann et al., 2007). Cronbach's alpha in the current sample was .72.

Results

First, BMI was computed from height and weight data according to the standard formula (mass in kilograms divided by height in meters squared). Next, data were screened. All variables evidenced normality except BMI. Further investigation revealed the lack of normality was due to four participants whose BMIs were substantial outliers (greater than 2 *SDs* above the sample mean). Excluding these participants (or, alternatively, Winsorizing their scores on this variable) resolved the lack of normality but did not change the pattern or statistical significance of any of the following analyses, thus their original data are included in this report. Table

Table 1
Descriptive Statistics and Intercorrelations Among Study Variables

Variable	1	2	3	4	5
<i>M</i>	29.73	24.97	4.19	7.75	3.94
<i>SD</i>	10.82	4.97	1.39	6.89	0.88
1. Age	—				
2. Body mass index	0.10	—			
3. Gay community identification	−0.26*	0.11	—		
4. Body dissatisfaction	−0.05	0.41**	−0.01	—	
5. Drive for muscularity	−0.04	0.31**	−0.04	−0.10	—

N = 76.

p* < .05. *p* < .01.

1 displays descriptive statistics and intercorrelations for key variables. Age was not related to either measure of body image disturbance; however it was associated with gay community identification and was thus included as a covariate in the following analyses. Of note, body dissatisfaction was not significantly correlated with drive for muscularity, $r = .10$, $p = .40$, suggesting that these body image concerns were relatively independent among sexual minority men in the current study.

To examine whether the association between gay community identification and body image disturbance differed by level of BMI, we followed steps outlined by Frazier, Tix, and Barron (2004) to test for moderation. We conducted two separate hierarchical multiple regression analyses, entering body dissatisfaction and drive for muscularity as the dependent variables in these two analyses. For both models, age was entered as a covariate on the first step. The second step included gay community identification and BMI (both grand mean-centered) as predictors. The interaction between gay community identification and BMI was entered on the final step.

When predicting body dissatisfaction, on the second step of the analysis BMI emerged as a significant predictor, $B = .55$, $SE = .15$, $p = .001$, but not gay community identification, $B = -.06$, $SE = .59$, $p = .92$. Higher levels of BMI among sexual minority men were associated with greater body dissatisfaction on average. However, this main effect was qualified by the hypothesized interaction between BMI and gay community identification on the third step, $B = -.40$, $SE = .16$, $p = .02$ (total $R^2 = .27$, $\Delta R^2 = .08$ for the third step).

To break down the interaction between gay community identification and BMI predicting body dissatisfaction, we computed simple slopes (Aiken & West, 1991) for the relationship between gay community identification and body dissatisfaction for those with relatively higher BMIs (+1 *SD*) and those with relatively lower BMIs (−1 *SD*). These slopes are plotted in Figure 1. As hypothesized, among sexual minority men with relatively higher BMIs, identification with the gay community predicted decreased levels of body dissatisfaction, $\beta = -.52$, $p = .03$. However, among gay men with relatively lower BMIs, identification with the gay community was marginally associated with greater levels of body dissatisfaction, $\beta = .28$, $p = .09$. It should be noted that observed power for the overall model was .53, whereas observed power for the interaction term was .40. Therefore, these results, including tests of specific simple slopes, should be interpreted with some caution due to low power.

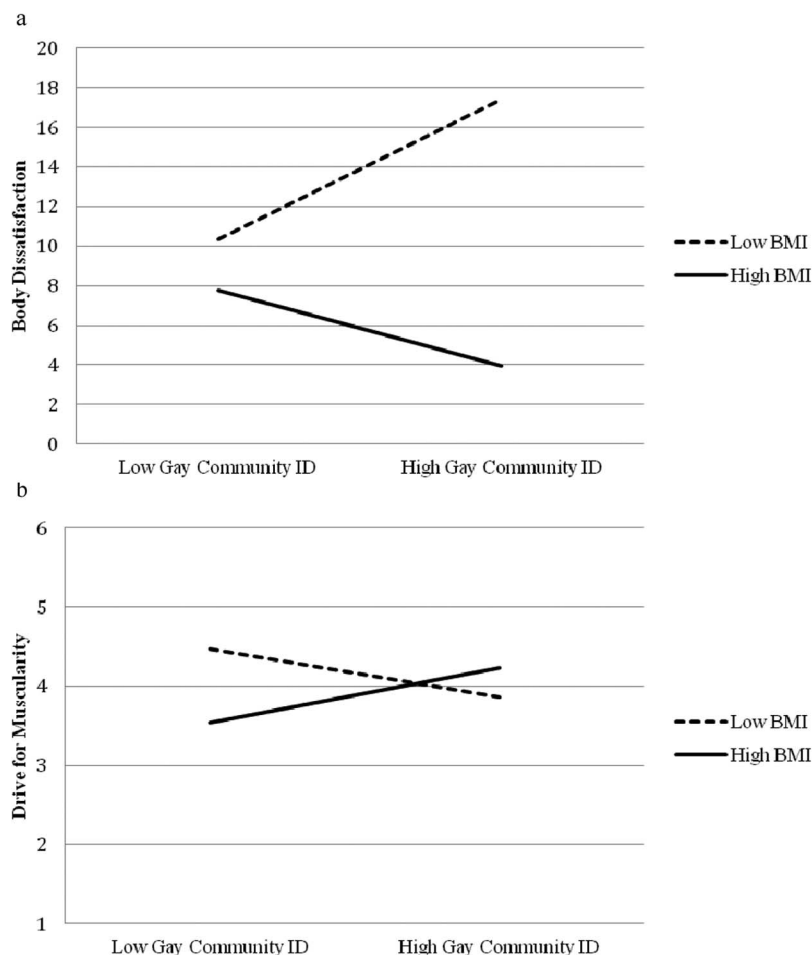


Figure 1. Interaction between gay community identification (ID) and body mass index (BMI) predicting body dissatisfaction (a) and drive for muscularity (b).

In the parallel model predicting drive for muscularity, on the second step of the analysis gay community identification was not a significant predictor, $B = -.07$, $SE = .08$, $p = .37$, but BMI was a significant predictor, $B = -.06$, $SE = .02$, $p < .01$. Similar to the previous model, higher levels of BMI among sexual minority men were associated with greater drive for muscularity. However, this main effect was once again qualified by a significant interaction on the third step, $B = -.05$, $SE = .02$, $p = .03$ (total $R^2 = .18$, $\Delta R^2 = .06$ for the third step).

Next, we examined the interaction between gay community identification and BMI predicting drive for muscularity. Again we computed simple slopes (Aiken & West, 1991), this time for the relationship between gay community identification and drive for muscularity for those with relatively higher BMIs ($+1$ SD) and those with relatively lower BMIs (-1 SD), which are plotted in Figure 1. Among sexual minority men with relatively higher BMIs, identification with the gay community was not significantly associated with drive for muscularity, $\beta = .35$, $p = .16$ (although the trend was toward an inverse association). As hypothesized, however, among sexual minority men with relatively lower BMIs, identification with the gay community was associated with lesser drive for muscularity, $\beta = -.39$, $p = .03$. Once again, observed

power was low for the overall model (.44) as well as for the interaction term (.30), and effects should be interpreted with some caution.

Discussion

In the current research, it was found that BMI moderated the association between gay community identification and body image disturbance (both body dissatisfaction and drive for muscularity) among sexual minority men. Phrased in another manner, gay community identification was associated with different body image concerns for heavier compared to thinner sexual minority men. Analyses of simple slopes revealed that gay community identification was associated with lesser body dissatisfaction for relatively heavier men and with marginally greater body dissatisfaction but lesser drive for muscularity for relatively thinner men. Overall, these models explained a substantial proportion of the variance in body dissatisfaction and drive for muscularity in the current study (approximately 27% and 18%, respectively).

These results highlight the importance of considering body type when evaluating the association between gay community identification and body image. Though higher BMI was associated with

greater body dissatisfaction and greater drive for muscularity on average, both of these main effects of BMI were qualified by significant interactions with gay community identification. Specifically, gay community identification was associated with lesser concern over being too fat among gay men with relatively higher BMIs (i.e., community identification acted as a protective factor). Although this might seem counterintuitive, the finding is in line with the notion that body ideals among the gay community vary. However, there was also a nonsignificant trend for heavier sexual minority men with greater levels of gay community identification to report greater drive for muscularity (suggesting a potential risk factor). The reverse pattern emerged for relatively thinner sexual minority men. For these men, gay community identification was associated with lesser drive for muscularity (i.e., a protective factor), but marginally greater (thinness-focused) body dissatisfaction (i.e., a risk factor).

Despite previous assumptions made in the literature on sexual minority men's body image concerning the ideal body type espoused by the gay community, a potential explanation for the results observed in the current study is that sexual minority men may place value on substantially different body types (Hennen, 2005). For example, heavier or stockier sexual minority men may identify with other men who also value a larger and more muscular figure, whereas thinner sexual minority men may identify with those who value the slim ideal that is often seen as the archetype of gay male attractiveness. Consideration of these differences is crucial to elucidating the mechanisms whereby gay community identification influences body image disturbance and consequent mental health. Furthermore, some of the inconsistencies in the current literature on sexual minority men's body image might be resolved by examining these factors. Given the links between men's body image and several types of mental health risks (depression, anxiety, eating disorders), clinicians treating gay men should take care to assess for an unhealthy focus on both thinness and/or muscularity in their patients. Those working with gay men with eating concerns should be aware of how involvement with the gay community may affect these concerns in different ways for different types of men.

One limitation of the current work is our reliance on BMI as a proxy for body type. Although BMI is a convenient and generally effective measure of body composition, it does not tap into more subtle differences revealed by bioelectrical impedance, skinfold measures, or other gauges of percent body fat. Furthermore, we did not ask participants to describe specific subgroups within the gay community (e.g., twinks, bears) that were most relevant to their identification but relied on the same general measure of identification for all participants.¹ Participants in the current study also tended to be younger adults (the oldest participant identified as 56); therefore it is important for future work to examine whether these associations function similarly among older sexual minority men as well. Another limitation of the current study was the relatively small sample size and resultant low power to detect significant effects. Despite this limitation, and general difficulties when attempting to detect moderated effects in nonexperimental studies (Frazier et al., 2004), we found parallel interactions between gay community identification and BMI predicting both body dissatisfaction and drive for muscularity. These significant results support the importance of considering differences in body type when conducting research with sexual minority men concerning

community identification and body image. However, the relatively low statistical power of the current study may have limited the ability to detect significant simple slopes when decomposing these interactions. Finally, the self-report, cross-sectional nature of this work allows us to describe associations between variables but not to verify the accuracy of reports or infer causation.

Despite these limitations, the observed results contribute to the extant literature on sexual minority men's body image and point toward an important path for future work. Only by considering the diversity of body-related values and norms within the gay community can researchers begin to understand how identification influences body image disturbance. As seen in the current study, gay community identification may serve as both a risk factor and a protective factor, potentially operating in different ways for sexual minority men based on other characteristics, such as BMI. Rather than relying upon a one-size-fits-all strategy, researchers and community groups should work together to design effective interventions that both reduce extant risk factors and bolster extant protective factors to attenuate the number of sexual minority men suffering from body image disturbance and eating disordered behaviors.

¹ Although the current study did not assess subgroup identification, data from a similar study (Waldron & Engeln-Maddox, 2011) with gay male participants in the Chicago area revealed significant subgroup differences in BMI, $t(36) = -4.61, p < .001, d = 1.54$, with self-identified twinks reporting significantly lower BMIs ($M = 21.70, SD = 3.96$) compared to self-identified bears ($M = 29.31, SD = 5.78$), supporting a subgroup identification hypothesis.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Beren, S. E., Hayden, H. A., Wilfley, D. E., & Grilo, C. M. (1996). The influence of sexual orientation on body dissatisfaction in adult men and women. *International Journal of Eating Disorders*, 20, 135–141. doi: 10.1002/(SICI)1098-108X(199609)20:2<135::AID-EAT3>3.0.CO;2-H
- Bergling, T. (2006). *Chasing Adonis: Gay men and the pursuit of perfection*. Binghamton, NY: Routledge.
- Cafri, G., & Thompson, J. K. (2004). Measuring male body image: A review of the current methodology. *Psychology of Men & Masculinity*, 5, 18–29. doi:10.1037/1524-9220.5.1.18
- Calogero, R. M., & Thompson, J. K. (2010). Gender and body image. In J. C. Chrisler & D. M. McCreary (Eds.), *Handbook of gender research in psychology* (Vol. 2, pp. 153–184). New York, NY: Springer. doi: 10.1007/978-1-4419-1467-5_8
- Carlat, D. J., Camargo, C., & Herzog, D. (1997). Eating disorders in males: A report on 135 patients. *The American Journal of Psychiatry*, 154, 1127–1132.
- Cash, T. F., Theriault, J., & Annis, N. M. (2004). Body image in an interpersonal context: Adult attachment, fear of intimacy, and social anxiety. *Journal of Social and Clinical Psychology*, 23, 89–103. doi: 10.1521/jscp.23.1.89.26987
- Davis, C., Karvinen, K., & McCreary, D. R. (2005). Personality correlates of a drive for muscularity in young men. *Personality and Individual Differences*, 39, 349–359.
- Doyle, D. M., & Molix, L. (2014). Perceived discrimination and well-being in gay men: The protective role of behavioural identification. *Psychology & Sexuality*, 5, 117–130. doi:10.1080/19419899.2011.653689

- Engeln-Maddox, R., Miller, S. A., & Doyle, D. M. (2011). Tests of objectification theory in gay and lesbian samples: Mixed evidence for proposed pathways. *Sex Roles*, 65, 518–532. doi:10.1007/s11199-011-9958-8
- Feldman, M. B., & Meyer, I. H. (2007). Eating disorders in diverse lesbian, gay, and bisexual populations. *International Journal of Eating Disorders*, 40, 218–226. doi:10.1002/eat.20360
- Forrest, J. I., Stevenson, B., Rich, A., Michelow, W., Pai, J., Jollimore, J., . . . Roth, E. A. (2014). Community mapping and respondent-driven sampling of gay and bisexual men's communities in Vancouver, Canada. *Culture, Health & Sexuality*, 16, 288–301. doi:10.1080/13691058.2014.881551
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51, 115–134. doi:10.1037/0022-0167.51.1.115
- Frederick, D. A., Peplau, L. A., & Lever, J. (2006). The swimsuit issue: Correlates of body image in a sample of 52,677 heterosexual adults. *Body Image*, 3, 413–419.
- Garner, D. M. (1991). *Eating Disorder Inventory-2: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Garner, D. M., & Garfinkel, P. E. (1979). The Eating Attitudes Test: An index of the symptoms of anorexia nervosa. *Psychological Medicine*, 9, 273–279. doi:10.1017/S0033291700030762
- Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2, 15–34. doi:10.1002/1098-108X(198321)2:2<15::AID-EAT2260020203>3.0.CO;2-6
- Hennen, P. (2005). Bear bodies, bear masculinity: Recuperation, resistance, or retreat? *Gender & Society*, 19, 25–43. doi:10.1177/0891243204269408
- Herzog, D. B., Newman, K. L., Yeh, C. J., & Warshaw, M. (1992). Body image satisfaction in homosexual and heterosexual women. *International Journal of Eating Disorders*, 11, 391–396. doi:10.1002/1098-108X(199205)11:4<391::AID-EAT2260110413>3.0.CO;2-F
- Kane, G. M. (2010). Revisiting gay men's body image issues: Exposing the fault lines. *Review of General Psychology*, 14, 311–317. doi:10.1037/a0020982
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia: W.B. Saunders.
- Levesque, M. J., & Vichesky, D. (2006). Raising the bar on the body beautiful: An analysis of the body image concerns of homosexual men. *Body Image: An International Research Journal*, 3, 45–55. doi:10.1016/j.bodyim.2005.10.007
- McCreary, D. R., & Sasse, D. K. (2000). An exploration of the drive for muscularity in adolescent boys and girls. *Journal of American College Health*, 48, 297–304. doi:10.1080/07448480009596271
- McCreary, D. R., & Sasse, D. K. (2002). Gender differences in high school students' dieting behavior and their correlates. *International Journal of Men's Health*, 1, 195–213. doi:10.3149/jmh.0102.195
- Muth, J. L., & Cash, T. F. (1997). Body-image attitudes: What difference does gender make? *Journal of Applied Social Psychology*, 27, 1438–1452. doi:10.1111/j.1559-1816.1997.tb01607.x
- Olivardia, R., Pope, H. G., Borowiecki, J. J., & Cohane, G. H. (2004). Biceps and body image: The relationship between muscularity and self-esteem, depression, and eating disorder symptoms. *Psychology of Men & Masculinity*, 5, 112–120. doi:10.1037/1524-9220.5.2.112
- Pope, H. G., Gruber, A. J., Mangweth, B., Bureau, B., deCol, C., Jouvent, R., & Hudson, J. I. (2000). Body image perception among men in three countries. *American Journal of Psychiatry*, 157, 1297–1301. doi:10.1176/appi.ajp.157.8.1297
- Pope, H. G., Phillips, K. A., & Olivardia, R. (2000). *The Adonis complex: The secret crisis of male body obsession*. New York, NY: The Free Press.
- Savin-Williams, R. C., & Vrangalova, Z. (2013). Mostly heterosexual as a distinct sexual orientation group: A systematic review of the empirical evidence. *Developmental Review*, 33, 58–88. doi:10.1016/j.dr.2013.01.001
- Siever, M. D. (1994). Sexual orientation and gender as factors in socio-culturally acquired vulnerability to body dissatisfaction and eating disorders. *Journal of Consulting and Clinical Psychology*, 62, 252–260. doi:10.1037/0022-006X.62.2.252
- Sladek, M. R., Engeln, R., & Miller, S. A. (2014). Development and validation of the Male Body Talk Scale: A psychometric investigation. *Body Image*, 11, 233–244. doi:10.1016/j.bodyim.2014.02.005
- Spillane, N. S., Boerner, L. M., Anderson, K. G., & Smith, G. T. (2004). Comparability of the Eating Disorders Inventory-2 between men and women. *Assessment*, 11, 85–93. doi:10.1177/1073191103260623
- Tiggemann, M., Martins, Y., & Kirkbride, A. (2007). Oh to be lean and muscular: Body image ideals in gay and heterosexual men. *Psychology of Men & Masculinity*, 8, 15–24. doi:10.1037/1524-9220.8.1.15
- Waldron, H., & Engeln-Maddox, R. (2011). *Subgroup identification in gay men predicts body image disturbance*. Poster presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.
- Willoughby, B. L. B., Lai, B. S., Doty, N. D., Mackey, E. R., & Malik, N. M. (2008). Peer crowd affiliations of adult gay men: Linkages with health risk behaviors. *Psychology of Men & Masculinity*, 9, 235–247. doi:10.1037/1524-9220.9.4.235
- Yelland, C., & Tiggemann, M. (2003). Muscularity and the gay ideal: Body dissatisfaction and disordered eating in homosexual men. *Eating Behaviors*, 4, 107–116. doi:10.1016/S1471-0153(03)00014-X

Received May 2, 2014

Revision received June 22, 2014

Accepted June 24, 2014 ■