



The Role of Masculinity and Femininity in Body Objectification: Comparison of Heterosexual and Gay Communities

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Abstract

Drawing on objectification theory, we investigated associations among age, gender-typed traits (masculinity, femininity), community involvement (gay and lesbian sample), and body objectification (body surveillance and body shame) in gay men, lesbians, and heterosexual men and women. Our sample included 390 participants from university and community settings. A total of 82 gay men, 62 lesbians, 82 heterosexual men, and 164 heterosexual women, M age = 23.06 years (range 18–62), completed a measure to assess body surveillance and body shame and masculinity and femininity. Additionally, the lesbian and gay participants completed an assessment to measure LGBT community involvement. Controlling for age, results were significant for the femininity \times masculinity interaction on body surveillance for gay men and lesbians, and masculine gender-typed traits for heterosexual women. Masculinity also was a significant predictor of body shame for lesbians. LGBT community involvement was non-significant for both gay men and lesbians. Our findings are consistent with objectification theory and highlight the importance of examining the complexities of gender (e.g., interaction between masculinity and femininity) and sexual orientation when body objectification is investigated.

Keywords Gender · Sexual orientation · Masculinity · Femininity · Body objectification

Introduction

Eating disorders are a major public health concern. The combined lifetime prevalence of DSM-5 eating disorders (includes Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder, and Other Specified Feeding or Eating Disorder) is estimated

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at 13.1% for women [62]. Estimated rates for men vary, but data reported from the National Comorbidity Replication suggest that men represent up to one third of those diagnosed with eating disorders [31]. Research has consistently found that gay and bisexual men are at increased risk for eating disorders when compared with heterosexual men [14]. In a large sample of LGB participants, the lifetime prevalence of eating disorders was 8.8% for gay and bisexual men, with another 15.5% reporting a subthreshold eating disorder [58]. Despite the long-standing belief that lesbians are protected from disordered eating, evidence suggests that lesbians and bisexual women develop eating disorders at rates similar to heterosexual women [49]. In fact, Davids and Green [9] reported higher rates of disordered eating in bisexual than in heterosexual men and women.

Gender-typed traits, particularly masculinity (e.g., self-confidence, independence), have been shown to be protective for heterosexual men against disordered eating behaviors [4], whereas feminine traits (femininity hypothesis) have been shown to be a risk factor for heterosexual men [21]. In addition, Meyer and colleagues [48] study of heterosexual men and women and gay men and lesbians found masculinity to be predictive of non-disordered eating (i.e., low levels of dieting and bulimic behaviors), and high feminine trait scores were predictive of dieting behaviors. Their findings did not vary by gender or sexual orientation. Ludwig and Brownell [44] found support that self-perceived masculine and androgynous women reported more body satisfaction than feminine women in a sample of heterosexual, lesbian, and bisexual women. Lakkis et al. [41] also reported that men and women, regardless of sexual orientation, reported that negative feminine behaviors (e.g., needing approval) were predictive of disordered eating. Furthermore, Murnen and Smolak [52], using a meta-analysis, found that more endorsement of feminine traits (e.g., relational or other-focused, helpful) and less endorsement of masculine traits were related to disordered eating in women. Additionally, Hospers and Jansen [30] reported that lower masculine trait scores were associated with higher levels of body dissatisfaction (see also [69]). Likewise, masculine traits negatively predicted body dissatisfaction in a sample of lesbians [28].

An aspect of gender-typed traits that has not been explored in relation to body image is the interaction of masculinity and femininity. That is, does the combination of varying levels of masculine and feminine gender-typed traits (e.g., being high on one and low and the other) influence elevations of risk or protection for body image concerns? Early conceptions of masculinity and femininity emphasized the importance of considering the combination of varying levels of masculine and feminine traits [1]. Indeed, one of the major contributions of Bem's [1] revolutionary approach was to move away from thinking of people as either masculine or feminine, but to emphasize that people could be high or low on both dimensions (or high on one but low on the other). Despite this being one of the main points of Bem's work, researchers rarely examine the interaction between the two continuous masculine and feminine traits scales (for an exception see also [54]). One study using the Bem Sex-Role Inventory (BSRI), which categorized participants into four groups (undifferentiated, masculine, feminine, or androgynous) using the often-critiqued categorical approach based on median splits,

found that heterosexual men reported greater body dissatisfaction when they endorsed greater femininity and lesser masculinity [55].

Additionally, our approach is guided by contemporary models of gender, which emphasize the multidimensional and complex nature of gender [33, 64, 70, 72]. For example, Tate et al.'s [64] gender bundle includes sex assigned at birth, current gender identity, gender roles and expectations, gender evaluations, and gender social presentation. As suggested by Keener [35], measuring gender-typed traits (i.e., masculine and feminine traits) provides information in one of many domains of gender expression. Developmental social constructionist models of gender suggest that gender-typed traits develop due to childhood socialization that largely occurs in gender-segregated contexts and that over time, interactions in specific contexts lead to the development of stable traits [42]. Because gender segregation and, thus, gender socialization is more variable for members of the LGBTQ community [13], we would expect gender-typed traits to operate differently by both gender and sexual orientation. In sum, the suggested conceptual model for the present study recognizes that gender and sexual orientation influence gender socialization, which affects the development of gender-typed traits, which have been shown to influence body image. To date, no studies could be found regarding interactions of gender-typed traits on body image or objectified body consciousness. Therefore, the researchers in the present study thought it necessary to examine the aforementioned constructs to get a more complete picture of the multidimensionality of gender.

The relationship among gender-typed traits and body image concerns perceivably may be mediated by objectified body consciousness. Objectification theory describes the manner in which girls and women are socialized to view themselves as if through the eyes of men, valuing aspects of physical appearance as judged by and through observation by men [19]. Objectified body consciousness is comprised of body shame, which is the emotional consequence of feeling one is being observed by men, surveillance, which is the tendency to body check and attempt to monitor external appearance, and appearance control, which is the belief that it is within one's ability to manage and control one's external appearance [47]. Since its inception, this model has been extended to heterosexual men [46], and the lesbian, gay, and bisexual (LGB) population [5, 16, 46] in relation to body image. Martins and colleagues [46] found that compared to heterosexual men, gay men reported significantly higher body surveillance, body shame, drive for thinness, and body dissatisfaction. Brewster et al. [5] found that body shame was significantly linked to eating disorder symptomatology in a sample of bisexual women, and Engeln-Maddox et al. [16] reported different pathways for eating disordered behavior in gay men and lesbians. Specifically, for gay men, body shame mediated the association between body surveillance and eating disordered behavior, whereas, for lesbians, eating disordered behavior was directly predicted by body shame.

Research evidence supports the role of objectified body consciousness in behavioral outcomes such as eating disorders and disordered eating [5, 7, 23, 53], body dissatisfaction [10, 50], and mental health, including depression [23] in men and women and in heterosexual and sexual minority populations. In fact, Dakanalis and colleagues [7] reported body objectification was the strongest predictor of eating

disorders in men and, similarly, Tiggemann and Kuring [67] found in men that disordered eating was related, more specifically, to body shame and surveillance.

Objectified body consciousness has been linked to disordered eating as well as other aspects of body image (i.e., drive for muscularity, body dissatisfaction) in both heterosexual and LGB communities [6–8, 18, 26, 47, 66, 71]. It is postulated that heterosexual women, gay men, and bisexual men and women, in particular, may be at risk for body objectification and thus body image disturbances/eating disorders because of vulnerability to the gaze of men.

Research also has shown that how we view our bodies may vary at particular times in our lives. Tiggemann [66] highlights that some aspects of body image are stable over time, whereas others are more susceptible to change across the lifespan. For example, evidence suggests that overall body dissatisfaction remains relatively stable across the life span [22, 61]. However, Tiggemann and Lynch [68] reported that surveillance (i.e., body checking) decreased across the life span for women. Similarly, in a meta-analysis examining body image across time in men and women, it was reported that thinness-oriented dissatisfaction decreased gradually for women, but not for men and muscularity-oriented dissatisfaction did not change in either women or men [34]. Another change that has been noted is in terms of the source of one's body image. For example, older adults may change their comparison group from culturally-based depictions of the thin ideal to same-aged peers [22]. In addition, some research found that older adults focus more on the utility of the body, rather than appearance, when evaluating body satisfaction [57], whereas, other research found gender differences with older men more focused on the utility of the body and older women more focused on the appearance of the body [24]. Thus, research highlights the importance of including age as a moderator or mediator when investigating body image.

Another factor that may account for discrepancies in body image research across sexual orientation and gender is differences in experienced stress and social pressure associated with body image. Huxley et al. [32], found that thin-ideal internalization was significantly related to pressure from the media and male partners in a sample of lesbian and bisexual women. Winterich [73] found sexual orientation mattered in how 46- to 71-year-old women saw their bodies. Specifically, lesbians appeared to be less affected by cultural expectation of body weight and appearance than heterosexual women and many heterosexual women interviewed stated their husbands made negative remarks about their bodies. In addition, Huxley et al. reported that weight satisfaction was negatively associated with pressure from family. Utilizing the tripartite influence model [65], Tylka and Andorka [71] reported that gay men's perceptions of their muscularity and body dissatisfaction were influenced by social pressure from others, including involvement in the gay community. In addition, Davids et al. [10] found that body objectification mediated the effects of gay community involvement and body dissatisfaction in a sample of gay men. Hence, interactions with and social pressure from others in the gay community may affect how gay men and women view their bodies.

The present study examined links among age, gender-typed traits (masculinity, femininity), community involvement (for gay and lesbian sample), and body objectification (body surveillance and body shame). Although original conceptions of body

objectification utilizing the Objectified Body Consciousness Scale [47] include body control, we did not include this subscale in the present study because more recent research [51] indicates the subscale items do not adequately reflect the construct. Given that the literature regarding body image constructs, gender-typed traits, and sexual orientation reported that masculinity may be protective and femininity may be a risk factor for poor body image, it was hypothesized that (1) feminine and masculine traits would be significant predictors of body objectification (i.e., surveillance and body shame) for women regardless of sexual orientation and for gay, but not heterosexual men; and (2) that masculine and feminine traits would interact to predict body objectification. That is, the combination of scoring low on feminine traits, but high on masculine traits would be especially protective against body objectification. In addition, previous research has shown that age and gay community involvement were related to aspects of body image. Therefore, the researchers also hypothesized that age of participants and gay community involvement for gay and lesbian participants would be positively related to body objectification.

This study significantly contributes to the literature in the following ways. First, the study examines questions regarding body objectification, gender-typed traits, and social pressure regarding body appearance from the gay community utilizing a comparison sample of heterosexual and gay men and women. Second, research has not examined the influence of age and the interaction of gender-typed traits in relation to body objectification in a heterosexual and gay and lesbian sample. Lastly, our research allows examination across gender and sexual orientation for the variables of interest and investigates the potential role of gay community involvement in body objectification. The inclusion of gay community involvement and gender-typed traits will highlight the complexities of gender and societal pressure in relation to body objectification.

Method

Participants

The sample included 390 participants from university and community settings. A total of 82 gay men (GM), 62 lesbians (L), 82 heterosexual men (HM), and 164 heterosexual women (HW) participated in the study. Based on responses to the demographic items asking for biological sex and gender identity, the majority of the sample was cisgender. Six of the lesbians identified as transgender (2), gender queer/nonbinary (3), or two-spirit (1). Five of the gay men identified as transgender (4) or gender queer/nonbinary (1). Categories of sexual orientation were based on responses to the question: "Sexual Orientation: Which category best describes how you identify yourself?" The choice options were: Heterosexual; Gay Male; Lesbian; Bisexual; Questioning; Other. Participants who self-identified as heterosexual men, heterosexual women, gay men, or lesbian were included in the analyses. Ages ranged from 18 to 62 ($M=23.06$; $SD=7.07$). The ethnicity breakdown for the sample was as follows: European American/White (81.3%); African American/Black (6.2%); Multi-Ethnic (4.1%); Latino-Hispanic (3.1%); Pan Asian (1.3%); American

Indian (.3%); Pacific Islander (.3%); Missing (2.3%). Demographic data by sexual orientation is included in Table 1.

Measures

Importance of Gay/Bisexual Community Activities Scale [29]

The Importance of Gay/Bisexual Community Activities Scale (IGBCA) is an 11-item measure that assesses exposure to and involvement in LGB culture. Items are rated on a 4-point numerical scale (1 = *not at all important to you*; 4 = *very important to you*) with higher scores indicating greater involvement in LGB culture. Sample items include “being politically active in the gay community” and “having gay friends.” For this study, the Importance of Socializing subscale was utilized. Cronbach’s alphas for the subscale have been reported in a sample of gay men as follows: (Importance of Socializing $\alpha = .88$; [44]. Tylka and Andorka [71] reported a Cronbach’s alpha of .87 in a sample gay men and validity by the IGBCA’s demonstrated association with internalized homophobia. The Cronbach’s alpha for the current sample for the Socializing scale was .96.

Objectified Body Consciousness Scale [47]

The Objectified Body Consciousness Scale (OBCS) is a 24-item measure that assesses the extent to which respondents report aspects of body objectification. Subscales included in the present study were Surveillance (an internalized view

Table 1 Participant demographics

	Total sample	Heterosexual men	Gay men	Heterosexual women	Lesbians
<i>Age</i>					
Mean (SD)	23.06 (7.07)	20.95 (5.58)	26.21 (6.36)	20.78 (6.63)	27.77 (7.16)
Range	18–62	18–50	18–52	18–62	18–40
<i>Ethnicity</i>					
European-American/White	317 (81.3%)	69 (84.1%)	60 (73.2%)	147 (89.6%)	41 (66.1%)
African-American/Black	24 (6.2%)	3 (3.7%)	5 (6.1%)	8 (4.9%)	8 (12.9%)
American Indian	1 (.3%)	0	0	0	1 (1.6%)
Pan Asian	5 (1.3%)	0	4 (4.9%)	0	1 (1.6%)
Pacific Islander	1 (.3%)	1 (1.2%)	0	0	0
Latino/Hispanic	12 (3.1%)	2 (2.4%)	5 (6.1%)	3 (1.8%)	2 (3.2%)
Multi-Ethnic	16 (4.1%)	3 (3.7%)	5 (6.1%)	4 (2.4%)	4 (6.5%)
Other Ethnicities	5 (1.3%)	1 (1.2%)	2 (2.4%)	1 (.6%)	1 (1.6%)
Missing	9 (2.3%)	3 (3.7%)	1 (1.2%)	1 (.6%)	4 (6.5%)

that one's body needs to conform to societal standards, with the tendency to body check and monitor external appearance; e.g., "during the day, I think about how I look many times") and Body Shame (feelings of shame in response to the perception that one does not conform to societal standards for appearance; e.g., "I feel like I must be a bad person when I don't look as good as I could"). Items are rated on a 7-point numerical scale (1 = *strongly disagree*; 7 = *strongly agree*) with higher scores indicating greater endorsement of the items. Cronbach's Alphas for the subscales in the original validation samples of women were as follows (Surveillance $\alpha = .89$; Body Shame $\alpha = .75$). Test-retest estimates were (Surveillance $r = .79$; Body Shame $r = .79$ [47]). Reliability has also been demonstrated in samples of lesbians, with Cronbach's Alphas reported by Engeln-Maddox et al. (Surveillance $\alpha = .71$; Body Shame $\alpha = .76$ [16]) and Kozee and Tylka (Surveillance $\alpha = .87$; Body Shame $\alpha = .88$ [40]). For gay and heterosexual men, Cronbach's Alphas have been reported by Engeln-Maddox et al. (Surveillance $\alpha = .72$; Body Shame $\alpha = .67$ [16]) and by Martins et al. (Gay Men: Surveillance $\alpha = .76$; Body Shame $\alpha = .81$ and Heterosexual Men: Surveillance $\alpha = .83$; Body Shame; $\alpha = .70$ [46]). Cronbach's alphas for the current sample were (Surveillance $\alpha = .83$; Body Shame $\alpha = .82$). Validity for the scale has been demonstrated by theoretically predicted associations between the OBCS scales and other measures (e.g., body dissatisfaction, body esteem, drive for thinness, dieting, and restrained eating, as well as measures of disordered eating [16, 40, 46, 47]).

Personal Attributes Questionnaire [60]

The Personal Attributes Questionnaire (PAQ) is a 24-item measure that assesses gender-typed personality traits. The 16 items comprising traditional masculine (e.g., aggressive, independent) and feminine (e.g., emotional, helpful) traits were used in this study. Items are rated on a 5-point numerical scale (scale anchors vary from *not at all* to *very*; 1 is equal to *not at all* and 4 is equal to *very* for some items, and the reverse is true for other items) with higher scores indicating greater endorsement of the trait. Initial validation of the PAQ reported Cronbach's alphas separately for samples of university men and women as follows: for Men: Masculinity $\alpha = .76$; Femininity $\alpha = .76$ and for Women: Masculinity $\alpha = .73$; Femininity $\alpha = .73$ [60]. There also was evidence of validity in the form of factor analyses that confirmed the masculinity and femininity scales, as well as discriminant analyses that reliably predicted gender classification [27]. Cronbach's alphas for the scale in more recent samples of college students are reported as: (Masculinity $\alpha = .77$; Femininity $\alpha = .71$ [36]) and (Masculinity $\alpha = .74$; Femininity $\alpha = .77$ [37]). Davids and Green [9] reported Cronbach's alphas for a sample of LGBT and heterosexual men and women (Gay Men: Masculinity $\alpha = .55$; Femininity $\alpha = .79$; Bisexual Men: Masculinity $\alpha = .75$; Femininity $\alpha = .82$) (Lesbians: Masculinity $\alpha = .55$; Femininity $\alpha = .67$; Bisexual Women: Masculinity $\alpha = .51$; Femininity $\alpha = .76$). Cronbach's alphas for the current sample were (Masculinity $\alpha = .71$; Femininity $\alpha = .73$). Construct validity was also demonstrated by the subscales' correlations with the instrumental and expressive subscales of the Bem Sex Role Inventory [9].

Procedures

Participants were recruited via both university and a variety of community settings. The survey was administered in a paper-and-pencil format when possible or via an identical version administered through an online data management system (Sona Ltd.). All research assistants and researchers completed online research ethics training prior to working on the study. The study was approved by the researchers' Institutional Review Board and all board policies and requirements, as well as American Psychological Association ethical standards, including informed consent, were carefully followed. Anonymity of the data was maintained throughout the study. Participants completed cards for raffle entry, either online or in-person, after completing the survey. The names for raffle entries were kept separate from the questionnaire data and were never linked in any way.

For the university students, participants came from both undergraduate introductory psychology classes and an LGBT student organization. Course credit was given in exchange for participation in the study for the classes. For the LGBT student organization, the incentive was the same as for the community participants. For the community settings, data were collected for both heterosexual and gay/lesbian groups in person at two major PRIDE Festivals, as well as a local community event, and an LGBT-focused statewide conference. In addition, cards inviting participation in the survey online were distributed at additional PRIDE Festivals and local events. Online recruitment included ads posted, including: Facebook pages of local community advocacy organizations and research assistants and associates, LGBT advocacy websites, and the APA Division 44 (Society for the Psychological Study of Lesbian, Gay, Bisexual, and Transgender Issues) Listserve. The major incentive for community participation was entry into a raffle to win a Kindle Fire, with a 1 in 15 chance of winning. Additional incentives included t-shirts, buttons, and pencils given away at festivals to attract attention and interest.

Results

Descriptive Analyses

Table 2 shows the bivariate correlations among all the study variables. Age was negatively correlated with body surveillance and positively correlated with masculinity and community involvement. Body surveillance and body shame were positively correlated. Masculinity was negatively correlated with body surveillance and body shame and positively correlated with femininity.

Because age was significantly correlated with some of our outcome variables, for descriptive purposes we conducted a MANCOVA with sexual orientation as the independent variable, body shame and body surveillance as the dependent variables, and age as the covariate. Results for body objectification and sexual orientation revealed a significant multivariate effect for sexual orientation (Wilks' Lambda = .94, $F[6,750] = 3.68$, $p < .001$, $\eta_p^2 = .03$) and for age (Wilks' Lambda = .97, $F[2,375] = 6.17$, $p = .002$, $\eta_p^2 = .03$). In the computed MANCOVA, for body

Table 2 Correlations between all study variables

	1	2	3	4	5	6
1. Age	–					
2. Body surveillance	–.15*	–				
3. Body shame	–.03	.54**	–			
4. Masculinity	.11*	–.31**	–.26**	–		
5. Femininity	.05	.00	.02	.11**	–	
6. Community involvement	.27**	–.02	.05	–.05	.14	–

* $p < .05$; ** $p < .01$

surveillance, age was a significant covariate, $F(1, 376) = 10.18, p = .002, \eta_p^2 = .03$. A significant main effect for sexual orientation was found for body surveillance, $F(3, 376) = 9.13, p < .001, \eta_p^2 = .05$; heterosexual men reported significantly lower levels of body surveillance compared to heterosexual women, gay men, and lesbians. For body shame, age was not a significant covariate, $F(1, 376) = .19, ns$. A significant main effect for sexual orientation was found for body shame, $F(3, 376) = 2.91, p = .04, \eta_p^2 = .02$; heterosexual men reported significantly lower levels of body shame compared to heterosexual women, but not lesbians or gay men. The means and standard deviations by sexual orientation for body surveillance and body shame are presented in Table 3.

Primary Analyses

To test our study hypotheses, hierarchical linear regression analyses were conducted separately by sexual orientation. Additionally, because the above analyses showed that age was a significant covariate and was correlated with several study variables, age was controlled by entering it in the first step of each regression model.

Body Surveillance

For gay men, in Step 1 of the hierarchical linear regression analysis, we entered age, community involvement, masculinity, and femininity, $F(4, 75) = .73, ns$. In Step 2, we entered the masculinity \times femininity interaction term, $F(5, 74) = 2.72, p = .03$. The beta weights for step 2 (see Table 4) showed that main effects of age, masculinity, femininity, and community involvement were not significant

Table 3 Means (SD) for the main effect of sexual orientation on body objectification

	Heterosexual men	Gay men	Heterosexual women	Lesbians	Total
Body surveillance	3.98 (1.16) _a	4.53 (1.00) _b	4.64 (1.19) _b	4.21 (1.31) _c	4.41 (1.19)
Body shame	2.98 (1.11) _a	3.30 (1.19)	3.48 (1.25) _b	3.24 (1.43)	3.30 (1.25)

Different subscripts in the same row are significantly different ($p < .05$)

Table 4 Body surveillance

Variable	<i>B</i>	<i>SEB</i>	β	<i>R</i> ²	ΔR^2
<i>Gay men</i>					
Step 1				.04	
Age	-.20	.02	-.13		
Masculinity	-.18	.22	-.10		
Femininity	.03	.24	.02		
Community involvement	.00	.02	.03		
Step 2				.14	.10**
Age	.03	.02	-.16		
Masculinity	-.06	.20	-.03		
Femininity	.04	.23	.02		
Community involvement	.01	.02	.04		
Masculinity \times femininity	-1.21	.38	-.35**		
<i>Lesbians</i>					
Step 1				.25**	
Age	-.02	.02	.09		
Masculinity	-.82	.24	-.43**		
Femininity	-.28	.30	-.12		
Community involvement	.04	.03	.15		
Step 2				.31**	.06
Age	.02	.02	-.10		
Masculinity	-.84	.24	-.46**		
Femininity	-.46	.30	-.20		
Community involvement	.06	.03	.22		
Masculinity \times femininity	-.91	.42	-.27*		
<i>Heterosexual men</i>					
Step 1				.04	
Age	-.01	.03	-.06		
Masculinity	-.32	.20	-.18		
Femininity	.18	.25	.09		
Step 2				.05	.01
Age	.01	.03	.07		
Masculinity	-.40	.22	-.22		
Femininity	.25	.25	.10		
Masculinity \times femininity	-.32	.33	-.12		
<i>Heterosexual women</i>					
Step 1				.16	
Age	-.04	.01	-.21*		
Masculinity	-.70	.16	-.32**		
Femininity	.02	.16	.01		
Step 2				.16	.00
Age	-.04	.01	-.21*		
Masculinity	-.70	.16	-.32**		
Femininity	.03	.17	.01		
Masculinity \times femininity	.07	.27	.02		

Table 4 (continued)

* $p < .05$; ** $p < .01$. Although some individual beta weights are significant for heterosexual women, the overall model is not significant

predictors of body surveillance. However, the masculinity \times femininity interaction was significant. Follow up analyses using PROCESS [25] were conducted to estimate the conditional effects of masculinity at varying values of femininity. Results indicated that the (negative) effect of masculinity was only significant at the highest (+1 SD) levels of femininity suggesting that, for gay men, the combination of being high on femininity and low on masculinity predicted greater body surveillance (see Fig. 1).

For lesbians, in Step 1 of the hierarchical linear regression analysis, we entered age, community involvement, masculinity, and femininity, $F(3, 49) = 4.74$, $p = .01$. In Step 2, we entered the masculinity \times femininity interaction term, $F(4, 48) = 4.59$, $p = .003$. The beta weights for step 2 (see Table 4) showed that main effects of age, femininity, and community involvement were not significant predictors of body surveillance. However, the main effect of masculinity was significant where less endorsement of masculine traits predicted greater endorsement of body surveillance. The masculinity \times femininity interaction was significant. Follow up analyses using PROCESS [25] were conducted to estimate the conditional effects of masculinity at varying values of femininity. Results indicated that the (negative) effect of masculinity was only significant at the highest (+1 SD) levels of femininity suggesting that, for lesbians, the combination of being high on femininity and low on masculinity predicted greater body surveillance (see Fig. 2).

For heterosexual women, in Step 1 of the hierarchical linear regression analysis, we entered age, masculinity, and femininity, $F(3, 157) = 10.05$, $p < .001$. In Step 2, we entered the masculinity \times femininity interaction term, $F(4, 156) = 7.51$, $p < .001$. The beta weights (see Table 4) showed that masculinity and age were significantly predicted body surveillance. Less endorsement of masculine traits predicted greater endorsement of body surveillance and being younger also predicted greater endorsement of body surveillance. The main effect of femininity and the masculinity \times femininity interaction were not significant.

Fig. 1 Gay men's body surveillance by masculinity and femininity. *Results indicated that the (negative) effect of masculinity was only significant at the highest (+1 SD) levels of femininity suggesting that, for gay men, the combination of being high on femininity and low on masculinity predicted greater body surveillance

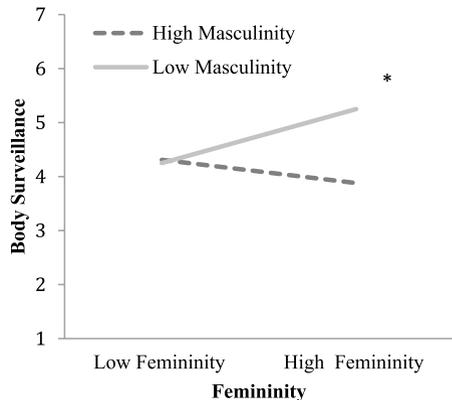
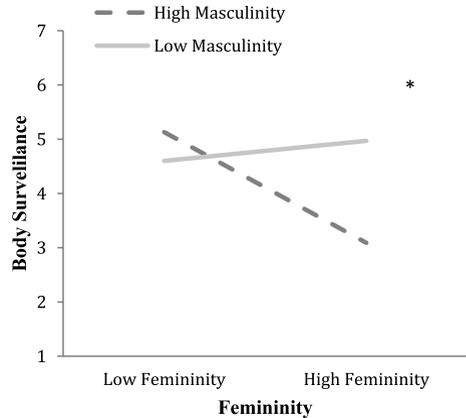


Fig. 2 Lesbians body surveillance by masculinity and femininity. *Results indicated that the (negative) effect of masculinity was only significant at the highest (+1 SD) levels of femininity suggesting that, for lesbians, the combination of being high on femininity and low on masculinity predicted greater body surveillance



The model for heterosexual men was not significant. Beta weights for the nonsignificant models are presented in Table 4.

Body Shame

For models predicting body shame, only the model for lesbians was significant. The models for gay men, heterosexual men, and heterosexual women were not significant. Beta weights for the non-significant models are presented in Table 5.

For lesbians, in Step 1 of the hierarchical linear regression analysis, we entered age, community involvement, masculinity, and femininity, $F(4, 54) = 4.75, p = .002$. In Step 2, we entered the masculinity \times femininity interaction term, $F(5, 53) = 3.76, p = .005$. The beta weights (see Table 5) showed that masculinity significantly predicted body shame. Stronger endorsement of masculine traits predicted less body shame. Age, femininity, and the masculinity \times femininity interaction were not significant predictors of body shame.

Discussion

The most interesting findings of the study were the significance of the femininity \times masculinity interactions on body surveillance for gay men and lesbians and the importance of masculine gender-typed traits across the heterosexual groups. Regarding overall differences among gender and sexual orientation, heterosexual men had lower levels of body surveillance than heterosexual women, lesbians, and gay men. Similarly, for body shame, heterosexual men had lower levels of body shame than heterosexual women.

Gay men who endorsed higher levels of body surveillance tended to endorse higher levels of femininity and lower levels of masculinity. Although this significant finding was isolated to body surveillance, trends in the data for body shame provide additional evidence for the importance of this finding. More specifically, although the overall model was not significant, inspection of the beta weights for the

Table 5 Body shame

Variable	<i>B</i>	<i>SEB</i>	β	R^2	ΔR^2
<i>Gay men</i>					
Step 1				.03	
Age	-.02	.02	-.08		
Masculinity	-.24	.26	-.12		
Femininity	.09	.28	.04		
Community involvement	-.02	.03	-.07		
Step 2				.10	.07*
Age	-.02	.02	-.12		
Masculinity	-.14	.26	-.07		
Femininity	-.02	.28	.01		
Community involvement	-.02	.03	-.06		
Masculinity \times femininity	-1.09	.46	-.27*		
<i>Lesbians</i>					
Step 1				.26**	
Age	.00	.02	.18		
Masculinity	-1.04	.26	-.50**		
Femininity	.49	.32	.19		
Community involvement	.06	.04	.20		
Step 2				.26	.00
Age	.00	.02	.02		
Masculinity	-1.04	.26	-.50**		
Femininity	.46	.34	.18		
Community involvement	.07	.04	.21		
Masculinity \times femininity	-.15	.48	-.04		
<i>Heterosexual men</i>					
Step 1				.06	
Age	.03	.03	.12		
Masculinity	-.37	.19	-.21		
Femininity	-.01	.23	-.04		
Step 2				.08	.02
Age	.03	.03	.12		
Masculinity	-.46	.21	-.27*		
Femininity	.01	.24	.00		
Masculinity \times femininity	-.41	.31	-.16		
<i>Heterosexual women</i>					
Step 1				.04	
Age	-.00	.02	-.01		
Masculinity	-.46	.19	-.20*		
Femininity	.00	.18	.01		
Step 2				.04	.00
Age	.00	.02	-.02		
Masculinity	-.46	.19	-.20*		
Femininity	.04	.19	.02		
Masculinity \times femininity	.21	.31	.06		

Table 5 (continued)

* $p < .05$; ** $p < .01$. Although some individual beta weights are significant for the gay men, heterosexual men, and heterosexual women, the overall models are not significant

individual predictor variables shows a trend for the interaction of femininity \times masculinity in the same direction for body shame as it was for body surveillance. That is, gay men who reported higher levels of body shame tended to have higher levels of femininity and lower levels of masculinity.

Research has shown that when men experience gender role strain or conflict due to beliefs of not meeting social expectations of masculinity, which is held in high esteem in U.S. culture [56], various manifestations of psychological distress surface [3, 20, 43]. Kimmel and Mahalik [39] found lower levels of body satisfaction in gay men if they reported not meeting the masculine ideal. In the current study, gay men who reported low masculine traits and high feminine traits were more likely to engage in body surveillance and there was a trend that this might extend to increased experiences of body shame. Perhaps gay men feel that they are not meeting the masculine “trait” ideal of their culture and this is spilling over into uncomfortable feelings and increased attention to their bodies. In support, Sanchez et al. [59] reported that some gay men felt that masculine ideals stifled their emotional expression and made them feel self-conscious about their appearance or interactions with effeminate gay men. Relatedly, Blashill and Vander Wal [3] reported that social sensitivity (i.e., fear of negative evaluation from others) and negative affect mediated gender role conflict (i.e., not meeting gender role expectations) and symptoms of eating disorders in gay men. Given that stereotypically feminine gay men tend to be less accepted in mainstream culture than masculine gay men, this may negatively influence how effeminate gay men view their bodies and constrain their social interactions. Hence, a pattern of higher levels of feminine traits combined with lower levels of masculine traits may create elevated levels of body self-consciousness leading to excessive body checking, monitoring, and shame. Contrary to Prichard’s [55] research, the masculine \times feminine interaction was not found for heterosexual men. Methodological approaches may explain the disparate results between the current study and Prichard’s findings.

Lesbians were significantly different from heterosexual men on body surveillance. According to objectification theory [19], women experience higher levels of body objectification because of their sexualized bodies that are experienced through the “gaze” and discernment of men. It is reasonable to find that lesbians would still be affected by the culturally influenced subjection to objectification due to residing in a patriarchal society, regardless of their having less interest in men as romantic partners. Gay men, on the other hand, were more similar in terms of body objectification to heterosexual women, perhaps because of their romantic targets both being men. However, humans are complex beings and how we see our bodies is more complicated than gender and sexual orientation identities.

Lesbians, like gay men, with higher levels of body surveillance endorsed higher levels of femininity and lower levels of masculinity. The researchers speculate that because masculinity tends to be more acceptable for women in the LGBT

community than in mainstream society, lesbians who are more feminine may see their bodies as undesirable in comparison to their more masculine peers. Deaux and Kite [11] contend that when lesbians are developing their sexual identity they may adopt “stereotypical” masculine roles as a way of fitting into what is expected of them in LGBT society. Furthermore, Kelly’s [38] qualitative study found that lesbians who presented as feminine felt they could make their lesbian identity invisible to mainstream culture, but had to balance their identities between two worlds, mainstream culture (femininity) and the LGBT community (masculinity). However, lesbians who have lower levels of masculine traits may feel “judged” or self-conscious because they do not fit the stereotypical masculine ideal in the lesbian community. Thus, stereotypical “butch” lesbians (i.e., expressions of masculinity) may be protected from, and “lipstick lesbians” (i.e., expressions of femininity) may be at risk for, body image disturbance.

The researchers also hypothesized that LGBT community involvement would predict body objectification in gay men because of potential body comparisons made to other gay men and the added competition for capturing the “gaze” of men. Previous research has shown that LGBT community involvement was associated with body dissatisfaction [9, 15, 17] and eating disorder symptomology [9]. However, our hypothesis was not supported. Perhaps the different constructs used to measure community involvement and body image across studies may explain the inconsistent outcomes. For example, our data measured body objectification and social engagement within the LGBT community, whereas other studies used BMI and muscularity and LGBT involvement such as gay recreation [17], and overall contact with the gay community [61]. Further research could examine types of LGBT community involvement and contextual factors (e.g., relationship status, gender expression) within the context of body objectification and gender-typed traits.

LGBT community involvement and body surveillance also were nonsignificant for lesbians, which is consistent with other research examining body image constructs [2]. Some evidence does suggest that more feminine lesbians may feel pressure to be more masculine to fit into the lesbian community [38]. Thus, body surveillance behaviors may increase due to contextual factors related to sexual identity such as comparisons to partners or potential partners within the LGBT community, and pressure to conform to stereotypical lesbian appearances [32]. Although this was not found in the present study, there may be significant factors that moderate or mediate objectified body consciousness such as relationships. Markey and Markey [45] reported that perceptions of body size were related to reported partners’ body size. Moreover, attachment styles within intimate partner relationships also were found to influence body shame directly and indirectly through body surveillance [12].

Masculine gender-typed traits also surfaced as significant for lesbians for body shame. Lesbians who endorsed more masculinity reported lower levels of body shame. Similarly, the present study found that the regression models for body shame were non-significant for heterosexual women, however, masculine traits surfaced as a predictor for body surveillance. Specifically, heterosexual women who reported higher levels of masculinity also reported lower levels of body surveillance, which was similar to lesbians. In support, Streigel-Moore et al. [63] reported no difference

among heterosexual women and lesbians regarding body image. Strelgel-Moore et al. posit that women, regardless of sexual orientation, are exposed to cultural messages surrounding women's bodies and thus both are affected negatively. Hence, the data suggests that masculine traits are a protective factor for body shame for lesbians and body surveillance for women, regardless of sexual orientation. Likewise, although the overall model was non-significant, masculinity was negatively related to body shame for heterosexual men.

Limitations and Future Directions

Much of the sample was comprised of participants with European-American/White ethnicities. Further research is needed to explore body objectification and gender-typed traits among a racially and ethnically representative sample for both the heterosexual and gay and lesbian populations. Although we had a large age range in the study, the mean age for the sample was within early adulthood. Given the cultural changes within the U.S. regarding gender roles and how age may affect how one views their body [3, 68], it may be fruitful to examine study questions across ages to compare differences in body objectification and gender-typed traits. The samples for this study varied in that the heterosexual participants were largely college students and lesbian and gay participants were mainly community members. Lastly, the gay and lesbian participants were mostly "out" and were more likely to participate in research than those who are questioning or closeted. A representative sample of these populations is warranted to get a more accurate assessment of gender-typed traits and body objectification.

Conclusion

By examining the interactive effects of masculinity and femininity, we more accurately represent the complexity of gender—where masculinity and femininity do not operate in isolation [1] and where unmitigated masculinity and femininity have different effects than when combined. Clearly, masculine gender-typed traits were the most salient characteristic related to body objectification (i.e., body surveillance and shame). Masculinity also surfaced as a protective factor for lesbians. Given the finding of the current study, society's favorability of masculine traits may put men and women, who do not endorse masculine traits, regardless of sexual orientation, at risk for body objectification that may lead to disordered eating.

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Compliance with Ethical Standards

Conflict of interest There are no potential conflicts of interest for any of the three authors (Drs. Massey, Keener, or McGraw) on the submitted manuscript.

Human Rights Statement This research involved human participants and received Slippery Rock University IRB approval (Protocol #2013-034-70-B).

Informed Consent The Slippery Rock University IRB approved the current study and participants received informed consent prior to participation in the study.

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