

Gender Role Development and Body Image among Male and Female First Year College Students

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Abstract In the current study we examined associations between gender role development and body image. Male and female first-semester college students ($N = 434$) who identified as African American, Latino/a American, and European American completed surveys about gendered personality traits (instrumentality/expressivity), gender role attitudes, and aspects of body image (e.g., satisfaction, orientation). Gendered traits were more frequently associated with body image than were gender role attitudes. In particular, individuals who were more instrumental and less inauthentic in their relationships felt more positive about their bodies. Gender role attitudes were also associated with body image, but sometimes in an unexpected direction. These findings highlight the importance of examining multiple components of gender role development and body image in both men and women.

Keywords Body image · Gender roles · College students

Sociocultural factors in the U.S. encourage individuals to be preoccupied with their weight, shape, and appearance (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Female college students in particular report a high prevalence of body image problems, such as body dissatisfaction and poor weight management practices (Klemchuk, Hutchinson, & Frank, 1990; Mintz & Betz, 1988). Al-

though less is known about men's body image, cultural trends toward a muscular ideal for men suggest that body image may increasingly become a salient issue for them as well (Leit, Pope, & Gray, 2001). Because body image disturbance predicts eating disorders (Polivy & Herman, 2002), it is important to understand how body image problems can be reduced. Our goal in the present study was to inform body image intervention programs by examining the links between body image and an area that may be closely associated with it—gender role development. In light of this goal, we examined these links in a sample of male and female first year college students.

In studies of college students' body image, it is important to contextualize students' experiences. First year students' evaluation of and orientation toward their appearance should be considered in light of the various ecological and social changes they are experiencing. Increased exposure to peers in multiple contexts on campus may influence body image. For example, residing in dormitories and attending classes and parties with same age peers may have a significant impact on students' body attitudes. Being in these peer-dominated environments may increase appearance comparisons to same-sex peers, or heighten self-consciousness due to the presence of potential dating partners. Moreover, involvement in campus organizations that encourage the importance of attractiveness (e.g., sororities; Schulken, Pinciario, Sawyer, Jensen, & Hoban, 1997) may promote changes in body image. Due to group values about appearance, students in these organizations may be more attentive to their looks, and thus, may continually evaluate how they "measure up" to cultural and perhaps group-specific beauty standards.

Sex, Ethnicity, and Body Image

Although all students experience ecological and social changes at the transition to college, they differ in their body

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image concerns. Historically, studies have included mostly European Americans, and have found that women express greater dissatisfaction than men do with their appearance and weight, and they place greater importance on and invest more in their appearance than men do (Mintz & Betz, 1986; Muth & Cash, 1997). In contrast, other work illustrates that men and women experience similar levels of discontent with their bodies when controlling for the direction of dissatisfaction (Cohn & Adler, 1992; Tantleff-Dunn & Thompson, 1995). Specifically, Cohn and Adler found that most women want to be thinner, whereas men are fairly split in their desire to be thinner or heavier.

More recent work on body image has included individuals from different ethnic groups. Studies that compared African American and European American women on body image have generally shown that African American women report more positive body image attitudes, including lower body dissatisfaction and more relaxed criteria for fatness (Molloy & Herzberger, 1998; Rucker & Cash, 1992). More recent work with Latina women has yielded mixed findings. Some work shows that European American women are more dissatisfied with their bodies than are Mexican American and Spanish women (Warren, Gleaves, Cepeda-Benito, Fernandez, & Rodriguez-Ruiz, 2005), yet other work indicates that Latina girls are more dissatisfied with their bodies than are female adolescents from other ethnic groups (including European Americans and African Americans; Neumark-Sztainer et al., 2002). Few studies, however, have tested sex and ethnic differences in body image together. Of those that did test both, some point to overall ethnic differences, such that African Americans report more favorable body image attitudes than European Americans and Latino/a Americans (Altabe, 1998; Miller et al., 2000). Yet, others indicate no significant differences among these groups (Demarest & Allen, 2000). Based on this previous work, we expected to find sex and ethnic differences in body image, and possible interactions between them as well.

Gender Role Development

Perhaps more important than the documentation of mean differences between men's and women's body image is the explanation of these differences. Examination of within group variation, specifically men's and women's gender role development, may help to do so. Gender role development is a multifaceted, context-dependent process, that includes the development of gendered personality traits, such as masculinity and femininity, and gender role attitudes, such as beliefs about men's and women's career roles (Deaux & Major, 1987; McHale, Updegraff, Helms-Erikson, & Crouter, 2001). Because body image is intimately connected to gender, it is

important to examine whether and how it relates to gender role development—the attitudes and traits that define the essence of masculinity and femininity. Although previous researchers have examined body image and its relation to either gendered personality traits or gender role attitudes (e.g., Cash, Ancis, & Strachan, 1997; Jackson, Sullivan, & Rostker, 1988), to our knowledge, no one has examined them together from a gender role development framework.

Gendered personality traits Previous research suggests an association between body image and gendered personality traits, often referred to as instrumentality or masculinity and expressivity or femininity (Bem, 1981; Spence & Helmreich, 1978). These associations are typically explained by one of two theories (Johnson & Petrie, 1995). Although drawn from the eating disorder literature, these theories may be relevant for understanding body image, given that body image disturbance is a strong predictor of eating problems (Polivy & Herman, 2002). Specifically, Boskind-Lodahl (1976) argued that women who develop eating disorders are overly engaged in the feminine role, from which a desire for thinness manifests as one consequence. In contrast, Steiner-Adair's (1986) discrepancy theory posits that women who develop eating disorders are low in instrumentality (i.e., masculinity), a circumstance that is problematic because women are inclined to be relational-oriented (i.e., feminine), yet they are also expected to possess instrumental traits. These instrumental traits are more socially valued and, therefore, are important for success. Thus, the femininity theory proposes a link between excessive femininity and body image disturbance, whereas the discrepancy theory argues for an association between low masculinity and body image problems.

In general, research supports the discrepancy theory, although there are some exceptions (Snyder & Hasbrouck, 1996). Studies show that body dissatisfaction is related to low levels of masculinity, particularly in women (Hawkins, Turell, & Jackson, 1983; Jackson et al., 1988; Kimlicka, Cross, & Tarnai, 1983). Although less is known about men, it is possible that men who lack masculine qualities may also have trouble meeting cultural expectations of masculinity, which may be reflected in their poor body attitudes. Other researchers have shown that men who are less masculine report poorer mental health outcomes, such as higher depression and anxiety, compared to men who are more masculine (O'Heron & Orlofsky, 1990).

Research also links the construct of appearance orientation—the importance of and investment in appearance—to gender role development. Gender schema theory (Bem, 1981) posits that gender-typed individuals are more likely to process information in terms of gender. Because cultural messages promote the importance of beauty and thinness for women, this theory suggests that feminine women may

be more sensitive to these messages than their non-gender-typed counterparts. Consequently, feminine women may be more likely to accept cultural messages about looks, as placing a high value on, and investing in, appearance may be a way to reinforce their femininity and, by extension, a means to increase their chances for social success.

Research demonstrates a link between femininity and appearance orientation in women (Jackson et al., 1988; Timko, Striegel-Moore, Silberstein, & Rodin, 1987), but less is known about this association in men. Although one study showed an association between femininity and appearance orientation in both men and women across the lifespan (ages 10 to 79; Pliner, Chaiken, & Flett, 1990), other work suggests that gender-typed men (i.e., men who are masculine) may be more oriented toward their appearance than other men are (Andersen & Bem, 1981). Given these findings, we expected that individuals who are more masculine would have more positive views of their appearance, and be more oriented toward their appearance. Also, we expected that individuals who are more feminine would have poorer views of their appearance and would be more oriented toward their appearance.

Another construct recently introduced to the literature is the experience of an inauthentic self in relationships with others. This construct captures the degree to which individuals internalize an inauthentic self in relationships with others, a quality that is considered socially “appropriate” yet unhealthy feminine behavior (Tolman & Porche, 2000). Because this measure is fairly new, few researchers have examined its relation to body image. Yet Tolman and Porche pointed out that, in addition to an inauthentic self in relationships, having an objectified perspective of one’s body is another conventional feminine quality. Given their perspective, we expected to find that individuals who are more inauthentic in their relationship with others would also evaluate their bodies more negatively.

Gender role attitudes Gender role attitudes may also play a role in body image development. College students have fairly liberal attitudes about gender roles, but women express more liberal attitudes than do men (e.g., Shearer, Hosterman, Gillen, & Lefkowitz, 2005). In addition, there is an association between feminist identification and a heightened awareness of gender inequity (Henderson-King & Stewart, 1994). It is possible that non-traditional individuals are more likely to reject cultural messages about body image and replace them with their own values about attractiveness. People with traditional attitudes, on the other hand, may be more likely to absorb cultural ideals, which are often narrow and, consequently, almost impossible to meet. Thus, traditional persons may be less satisfied with their appearance than non-traditional persons. It is not surprising that studies suggest that feminist individuals may

be more protected than non-feminists from the negative effects of such appearance-related messages (Garner, 1997; Snyder & Hasbrouck, 1996).

However, the association between gender role attitudes and body image may depend on the particular attitude examined. Cash et al. (1997) found that women who endorsed more traditional attitudes about relationships between men and women were more oriented toward their appearance and evaluated their appearance less positively, but that attitudes toward men’s and women’s societal roles in general were not associated with body image. In contrast to that work, one study of the effects of exposure to sexist television advertisements on undergraduates’ body dissatisfaction showed that feminists had more negative attitudes toward the sexist advertisements, but were equally as affected by them as were their more traditional counterparts (Lavine, Sweeney, & Wagner, 1999).

These findings suggest that gender role attitudes have multiple components and that their associations with body image are likely to be complex. In the current study, we examined attitudes that are relevant in college students’ lives, that is, views on whether men and women should avoid cross-gender behavior and attitudes toward men’s and women’s roles in marital relationships. Based on prior work, we expected those who have more traditional views about cross-gender behavior and men’s and women’s roles within relationships to report being more oriented toward their appearance and to have poorer views of their appearance.

In sum, we examined body image and its association with gender role development (both gendered personality traits and gender role attitudes) in an ethnically diverse sample of first year college students. Unlike much previous work, we tested differences in body image as a function of both sex and ethnicity, and we examined the association between multiple measures of both body image and gender role development. We proposed the following: (1) Men would report a more positive body image than women would (2) African Americans would report a more positive body image than would European Americans and Latino/a Americans (3) Individuals who are more masculine would report a more positive body image, and individuals who are more feminine would report a less positive body image (4) Individuals with more traditional gender role attitudes would report a less positive body image.

Materials and Methods

Participants and Procedure

We recruited first year college students from a large northeastern university. In September of their first year, we contacted all African American and Latino/a American students ages 17 to 19, as well as a randomly selected subsample (9%)

of European American students ages 17 to 19. By selecting a smaller percent of European American students, we increased our chances of obtaining equally sized groups. Of the 839 students contacted, 51.7% agreed to participate. Participation rates by ethnic group were fairly similar; 58% of African Americans, 54% of Latino/a Americans, and 46% of European Americans agreed to participate. Students who agreed to participate completed a questionnaire in a classroom setting. Informed consent procedures were followed, and students received \$25 compensation.

The total sample consisted of 434 students (52% women; 48% men). The percent of women (51–53%) and men (47–49%) in each ethnic group was similar. Participants ranged in age from 17.5 to 19.8 years ($M = 18.5$; $SD = 0.4$). Based on registrar's categorization and students' self-categorization, 39% were classified as European American, 32% African American (including African, African American, and Caribbean), and 29% Latino/a American (including Mexican American, Puerto Rican, and South American). Of the participants, 97% are identified as heterosexual; 0.2% as homosexual, gay, or lesbian; 2% as bisexual, and 0.7% as other (e.g., "confused", "undefined sexuality").

Measures

Body Mass Index (BMI) Participants were asked for their height and their weight. From these data, their body mass index was calculated (see Centers for Disease Control and Prevention, 2006, for the formula).

The Contour Drawing Rating Scale (CDRS) The CDRS (Thompson & Gray, 1995) was used to assess body dissatisfaction. It consists of nine contour drawings, numbered from 1 to 9, that increase incrementally in size from extremely thin to extremely obese. The figures' heads were removed because we wanted all participants to identify equally with the drawings. Group discussions with undergraduate students at the same university had revealed previously that the hair and faces of the figures were perceived as European American. Patel and Gray (2001) also removed the figures' heads for similar reasons in their study of African American undergraduates. Based on viewing the figure drawings of their own sex, participants were asked to indicate the drawing that they thought approximated their current body (current figure), as well as the drawing that came closest to what they wished they could look like (ideal figure). The degree of *body dissatisfaction* was measured by the discrepancy between the current and ideal scores. In all analyses (except where indicated), the absolute value of the body dissatisfaction scores were used.

In a sample of 32 college women, Thompson and Gray (1995) reported good 1-week test–retest reliability ($r = .78$). They established concurrent validity by examining

correlations between current figure ratings and self-reported weight ($r = .71$) and between current figure ratings and BMI ($r = .59$). Concurrent validity in the current sample was satisfactory as well. The association between self-ratings and self-reported weight was $r = .69$, and the correlation between self-ratings and BMI was $r = .77$.

Multidimensional Body-Self Relations Questionnaire (MBSRQ) The physical appearance-related subscales of the MBSRQ (Cash, 2000) measure attitudes toward appearance and the body. The *appearance evaluation* subscale has seven items that assess respondents' satisfaction with their overall physical appearance (e.g., "I like my looks just the way they are"). The *appearance orientation* subscale assesses the importance of appearance, the amount of personal attention given to appearance, and the degree of behavioral investment in grooming the body. Participants indicate their agreement with each of 12 statements (e.g., "Before going out, I usually spend a lot of time getting ready"). Responses to these two subscales are on a five-point scale that ranges from 1 = definitely disagree to 5 = definitely agree. The nine-item *body areas satisfaction* subscale measures the degree of satisfaction with specific areas of the body (e.g., face, lower torso). Responses to this subscale are also on a five-point scale (1 = very dissatisfied to 5 = very satisfied). Reliability on all three subscales in the current study was satisfactory (women, $\alpha = .76$ –.90; men, $\alpha = .81$ –.88), similar for the three ethnic groups, and comparable to the alphas reported by Cash.

Bem Sex Role Inventory-Short form (BSRI-s) The shortened form of the BSRI (Bem, 1974) measures the extent to which individuals describe themselves as having personality traits that are *instrumental* and *expressive*. These constructs are considered to be socially desirable aspects of masculinity and femininity, respectively. The measure consists of ten instrumental adjectives (e.g., 'assertive'), ten expressive adjectives (e.g., 'affectionate'), and ten gender-neutral, distracter adjectives (e.g., 'conscientious'). Participants rated the extent to which each adjective described themselves on a scale that ranged from 1 (never or almost never true) to 7 (always or almost always true). In the current study, reliability for the instrumental (women, $\alpha = .76$; men $\alpha = .81$) and expressive subscales (women, $\alpha = .89$; men, $\alpha = .87$) was comparable to that reported by Campbell, Gillaspay, and Thompson (1997), and was similar across ethnic groups.

Inauthentic Self in Relationships (ISR) The *inauthentic self in relationships* subscale of the Femininity Ideology Scale (Tolman & Porche, 2000) measures the degree to which individuals internalize inauthentic relationships with others

(e.g., “I worry that I make others feel bad when I am successful”). Contrary to the BSRI, this measure does not assess masculinity or femininity per se, but does measure the extent to which individuals adhere to social norms for negative gender-appropriate behavior. Although the measure was developed for use with women, it may also be appropriate for use with men. Just as expressivity is evident in men, inauthenticity in relationships with others can also be present in men, even though both expressivity and inauthenticity in relationships with others are both more associated with women. The scale contains ten items to which participants respond on a scale from 1 = strongly disagree to 5 = strongly agree. Tolman and Porche reported good reliability ($\alpha = .81$) in a sample of undergraduates. Reliability in the current sample was acceptable (women, $\alpha = .71$; men $\alpha = .59$), and was similar across ethnic groups.

Male Role Norms Scale (MRNS) The *antifemininity* subscale of the MRNS (Thompson & Pleck, 1986) measures the degree to which individuals believe that men should not act in a feminine way. This subscale has seven items (e.g., “It is a bit embarrassing for a man to have a job that is usually filled by a woman”). Participants rated their agreement with these items on a seven-point scale (1 = strongly disagree to 7 = strongly agree). In the current investigation, reliability for this subscale (women, $\alpha = .81$; men, $\alpha = .82$) was satisfactory, similar in each ethnic group, and comparable to those reported by Thompson and Pleck.

Female Role Norms Scale (FRNS) The *antimascularity norms* subscale of the FRNS (Lefkowitz, Shearer, Gillen, & Espinosa-Hernandez, 2006) was created based on the antifemininity norms subscale of the MRNS. Each of the seven items in the antimascularity norms subscale (e.g., “It is a bit embarrassing for a woman to have a job that is usually filled by a man”) was constructed to correspond to a respective item in the antifemininity norms subscale, and thus

to reflect endorsement of the view that women should not display masculine behavior. Responses ranged from 1 = strongly disagree to 7 = strongly agree. Reliability for this subscale was satisfactory (women, $\alpha = .76$; men $\alpha = .79$), and comparable across ethnic groups.

Attitudes Toward Family Roles (ATFRS) The *marital roles* subscale of the ATFRS (Hoffman & Kloska, 1995) assesses traditional attitudes toward marital roles. Respondents rated their agreement with six statements (e.g., “Housework and childcare should be more a woman’s job than a man’s”) on a four-point Likert scale (1 = strongly disagree to 4 = strongly agree). Reliability in the current study (women $\alpha = .86$; men $\alpha = .89$) was comparable to that reported by Hoffman and Kloska, and was similar in the three ethnic groups.

Results

We began our analyses by testing the associations among the gendered personality traits and gender role attitudes and among the body image measures to determine if they were independent constructs. Sex and ethnic differences in BMI were also tested to determine differences in actual body size as a context for understanding differences in body image. To address our first and second hypotheses, we performed a series of ANOVAs to examine sex and ethnic differences in body image. Finally, we tested our third and fourth hypotheses using regression, as a means of understanding how well each gender role development measure explained variation in body image in the context of the other predictors.

Preliminary and Descriptive Analyses

Correlations were calculated to examine the associations among the gendered personality traits and gender role attitudes. The magnitude of these correlations ranged from

Table 1 Correlations among gendered personality traits and gender role attitudes.

Measures	Instrumentality	Expressivity	Inauthentic self in relationships	Male antifemininity norms	Female antimascularity norms	Marital roles
Instrumentality		.11	-.42***	-.12	-.19**	-.12
Expressivity	.05		.02	-.12	-.02	.04
Inauthentic self in relationships	-.37***	.11		.12	.11	.27***
Male antifemininity norms	.11	-.30***	-.05		.63***	.44***
Female antimascularity norms	.05	-.28***	-.03	.56***		.39***
Marital roles	.07	-.14*	.09	.41**	.49***	

Sample sizes were: women ($N = 226$); men ($N = 205$ – 207). Correlations for women are presented above the line; correlations for men are presented below the line.

* $p < .05$

** $p < .01$

*** $p < .001$

.02 to .63 for women and .03 to .56 for men (see Table 1). Correlations among the attitudes toward roles measures (MRNS, FRNS, ATFRS) were fairly robust for both sexes; many of the other correlations were in the low to moderate range. Thus, the magnitude of these correlations was not high enough to discount using the gender role development scales as separate measures.

Correlations among the body image measures were also calculated to determine that those variables were independent. The strength of the correlations ranged from .03 to .77 for women, and from .06 to .74 for men (see Table 2). The variables that were most highly associated were the measures that captured self-evaluation of the body. In contrast, appearance orientation was significantly associated with another measure in only one of the six correlations. Thus, although there were significant correlations among these variables, the magnitude of these associations was low enough to warrant using them as independent variables in the analyses.

We also tested sex and ethnic differences in BMI by performing a 2×2 ANOVA. There was a significant main effect for sex, $F(1, 267) = 13.8$; $p < .001$; men ($M = 24.6$; $SD = 4.7$) had a higher BMI than women did ($M = 23.0$; $SD = 4.3$). There was also a significant main effect for ethnicity, $F(2, 200) = 10.3$; $p < .001$. Follow-up Tukey tests showed that African Americans ($M = 25.1$; $SD = 5.5$) had a larger BMI than Latino/a Americans ($M = 23.4$; $SD = 3.9$) and European Americans ($M = 22.9$; $SD = 3.9$). There were no significant interactions between sex and ethnicity. The mean BMI for most groups was in the upper end of the normal range (18.5 to 24.9) (Centers for Disease Control and Prevention, 2006).

Sex, Ethnicity, and Body Image

The first hypothesis was that men would report a more positive body image than would women, and the second hypothesis was that African Americans would report a more positive body image than would European Americans and Latino/a Americans. Two-way ANOVAs were performed to test sex and ethnic differences (and their interactions) in body image. In each ANOVA, sex and ethnicity were the

independent variables, and measures of body image were the dependent variables. There were significant main effects of sex on all measures of body image. Women evaluated their appearance less favorably than men did, they reported lower satisfaction with areas of their body, were more oriented toward their appearance, and reported a greater discrepancy between the figure they perceived themselves to look like and the figure they would ideally like to resemble (based on the absolute value of their dissatisfaction scores). There was also a significant main effect of ethnicity on appearance evaluation (see Table 3). Tukey post hoc tests revealed that African Americans evaluated their appearance more favorably than did European Americans ($p < .05$).

In addition, there was a significant sex by ethnicity interaction for appearance orientation (see Table 3). Follow up t -tests revealed that among both European Americans and Latino/a Americans, women were more oriented toward their appearance than men were ($ps < .001$), but among African Americans, there was no significant sex difference, $t(137) = -.67$; $p > .05$. Therefore, the second hypothesis was partially supported.

In addition to these ANOVAs, sex and ethnic differences were also tested by performing chi-square analyses on the signed discrepancy scores created from the figure drawings. For the analysis of sex differences, three groups were created based on individuals' discrepancy scores between their current and ideal figures—those who wanted to be smaller, those who were satisfied with their bodies, and those who wanted to be larger. Results showed that the difference was significant, $\chi^2(2, 430) = 50.35$, $p < .001$. Among women, 72% wanted to be smaller, 22% were satisfied with their bodies, and 6% wanted to be larger. Among men, 41% wanted to be smaller, 35% were satisfied with their body, and 24% wanted to be larger. Thus, the first hypothesis was supported by these analyses.

The same three-group procedure (want to be smaller, satisfied with body, want to be larger) was used to test ethnic differences in body dissatisfaction. Results indicated that among European Americans, 62% wanted to be smaller, 28% were satisfied with their bodies, and 11% wanted to be larger. Among African Americans, 49% wanted to be smaller, 33%

Table 2 Correlations among body image measures.

Measures	Appearance orientation	Appearance evaluation	Body areas satisfaction	Body dissatisfaction
Appearance orientation		-.03	-.04	.17*
Appearance evaluation	.09		.77**	-.66**
Body areas satisfaction	-.06	.74**		-.59**
Body dissatisfaction	.14	-.59**	-.59**	

Sample sizes were: women ($N = 224$ – 225); men ($N = 205$ – 207). Correlations for women are presented above the line; correlations for men are presented below the line.

* $p < .01$

** $p < .001$

Table 3 Mean differences in body image measures by sex and ethnicity.

Variables	European American Mean (SD)	African American Mean (SD)	Latino/a American Mean (SD)	F (ethnicity)	F (sex)	F (interaction)
Appearance orientation				3.42*	21.96***	3.37*
Women	42.55 (8.61)	42.66 (8.01)	43.39 (7.11)			
Men	37.04 (8.93)	41.79 (7.49)	38.71 (8.08)			
Appearance evaluation				3.38*	8.47**	0.35
Women	23.32 (5.44)	25.26 (6.10)	23.29 (5.59)			
Men	25.17 (4.81)	26.18 (5.64)	25.19 (5.49)			
Body areas satisfaction				2.40	9.68**	1.00
Women	30.57 (5.07)	31.90 (6.20)	29.36 (5.93)			
Men	32.16 (4.97)	32.72 (6.98)	32.19 (5.63)			
Body dissatisfaction				.58	14.18***	1.53
Women	1.32 (0.93)	1.17 (1.03)	1.33 (1.08)			
Men	0.78 (0.75)	0.99 (0.99)	1.01 (0.87)			

Due to missing data, sample sizes were: European American women ($N = 87$ – 88), African American women ($N = 71$ – 72), Latina American women ($N = 66$), European American men ($N = 80$), African American men ($N = 68$), Latino American men ($N = 57$ – 59)

* $p < .05$

** $p < .01$

*** $p < .001$

were satisfied, and 19% wanted to be larger. Among Latino/a Americans, 60% wanted to be smaller, 24% were satisfied, and 15% wanted to be larger. Ethnic group differences were not significant, $\chi^2(4, 430) = 7.6, p > .05$, which failed to support the second hypothesis. These analyses were also not significant ($p > .05$) when we performed them separately by sex.

Bivariate Associations between Gender Role Development and Body Image

Correlations were calculated as a first test of associations between measures of gender role development and body image (see Table 4). In these analyses, we controlled for BMI because much work has shown that individuals with higher BMI's have poorer body image (e.g., Yates, Edman, & Aruguete, 2004). We present the correlations for men and women separately because, as shown in Table 3, there are significant sex differences in body image. In general, the correlations indicate that individuals who were more instrumental and less inauthentic in relationships had a more positive body image. Associations between gender role attitudes and body image were less consistent across sex and measure. However, findings point to associations between more traditional gender role attitudes in some domains and a stronger orientation toward appearance.

Explanation of Body Image from Gendered Personality Traits and Gender Role Attitudes

Besides bivariate associations, we were interested in understanding how gender role constructs would explain variation

in body image in the context of other gender role development measures. Thus, four regressions were performed in which sex (1 = men, 2 = women), ethnicity, and BMI were entered as controls in Step 1. Ethnicity was coded so that African Americans were in one group (coded as 1), and European Americans and Latino/a Americans in another group (coded as 0). Previous research shows that African Americans have a more positive body image than do European Americans and Latino/a Americans (Altabe, 1998; Miller et al., 2000), so, to control for this difference, it was necessary to combine European Americans and Latino/a Americans in one group. Next, the gender role development measures were entered in Step 2, and two-way interactions between sex and each gender measure were entered in Step 3 to test for sex differences in patterns of association. The four body image variables—appearance orientation, appearance evaluation, body areas satisfaction, and body dissatisfaction—were the outcome variables.

In all four models, gendered personality traits and gender role attitudes were significant predictors of body image; between 18 and 34% of the variance in the final model was explained (see Table 5). For the model with *appearance orientation* as the dependent variable, the first and second steps were significant, and the third step was marginally significant. We have decided to interpret this third step, given the difficulty of detecting interaction effects in regression models (Jaccard & Wan, 1995; McClelland & Judd, 1993). In this step, ethnicity was a significant predictor, and there were also significant interactions with sex for the female antimasculinity norms scale and the marital roles scale. Follow-up regressions were performed separately by sex to

Table 4 Partial correlations between body image and gender role development by sex (controlling for BMI).

Measures	Appearance orientation	Appearance evaluation	Body areas satisfaction	Body dissatisfaction
Women				
Instrumentality	-.04	.32***	.33***	-.27***
Expressivity	.11		.12	.06
Inauthentic self in relationships	.23***	-.47***	-.42***	.28***
Male antifemininity norms	.23**	.03	-.04	.03
Female antimasculinity norms	.30***	.01	.03	.13*
Marital roles	.04	-.05	.04	
Men				
Instrumentality	.02	.32***	.23**	-.18*
Expressivity	.05	.11	.11	.02
Inauthentic self in relationships	.10	-.18**	-.24***	.10
Male antifemininity norms	.15*	.16*	.05	.11
Female antimasculinity norms	.13	.08	.03	.07
Marital roles	.17*	.01	-.03	.05

Due to missing data, sample size was $N = 219$ for women, and $N = 197$ for men.

* $p < .05$

** $p < .01$

*** $p < .001$

determine sex differences in these associations. Results showed that the first association was significant for women, $\beta = .31$; $p < .001$, but not for men, $\beta = .03$; $p > .05$. As predicted, women who were more opposed to women acting in a masculine way were more oriented toward their appearance. Follow-up regressions performed separately by sex for the marital roles interaction showed that this association was significant for women, $\beta = -.21$; $p < .01$, but not for men, $\beta = .09$; $p > .05$. Contrary to our expectations, women who had more traditional attitudes toward marital roles were less oriented toward their appearance.

In the model with *appearance evaluation* as the outcome variable, all three steps were significant. In the third step of this model, there were main effects for ethnicity, BMI, and instrumentality, and marginal main effects for sex and expressivity. Specifically, individuals who were more instrumental and more expressive (this trend did not reach significance) evaluated their appearance in a more favorable way. Also, there was a significant interaction between sex and inauthentic self in relationships. Follow-up regressions performed separately by sex showed that the association was significant for women, $\beta = -.39$; $p < .001$, but not for men, $\beta = -.07$; $p > .05$. Women who were more inauthentic in their relationships evaluated their appearance in a less positive way.

In the second step of the model with *body areas satisfaction* as the outcome (as the third step was not significant), sex, ethnicity, BMI, instrumentality, expressivity, and inauthentic self in relationships were significant predictors. Individuals who were more instrumental, expressive, and

less inauthentic in their relationships were more satisfied with areas of their body.

In the second step of the model with *body dissatisfaction* as the outcome (as the third step was not significant), sex, BMI, instrumentality and inauthentic self in relationships were significant predictors, and sex was a marginally significant predictor. Individuals who were less instrumental and more inauthentic in relationships were more dissatisfied with their bodies.

Discussion

Sex and Body Image

In the current study we examined associations between gender role development and body image in an ethnically diverse sample of first-year college students. In particular, we were interested in understanding sex and ethnic differences in body image, as well as how gendered personality traits and gender role attitudes were associated with body image.

Results support our first hypothesis that men would have a more positive body image than would women. We measured multiple components of body image, and thus, could test sex differences across multiple domains. Similar to previous researchers (e.g., Muth & Cash, 1997), we found that women were more oriented toward their appearance, evaluated their appearance less favorably, and were less satisfied with their body areas than were men. Considering that men's BMI was significantly higher than women's

Table 5 Standardized betas in regression model predicting body image from gendered personality traits and gender role attitudes.

Variable	Appearance orientation	Appearance evaluation	Body areas satisfaction	Body dissatisfaction
Step 1				
Sex	.23***	-.20***	-.21***	.27***
Ethnicity	.11*	.19***	.16**	-.10*
BMI	-.01	-.40***	-.38***	.50***
Step 2				
Sex	.28***	-.17***	-.19***	.26***
Ethnicity	.12*	.15***	.12**	-.08†
BMI	-.00	-.42***	-.39***	.51***
Instrumentality	.06	.20***	.15**	-.16**
Expressivity	.10*	.06	.12**	.06
Inauthentic self in relationships	.19**	-.23***	-.26***	.11*
Male antifemininity norms	.12*	.10†	-.01	.06
Female antimasculinity norms	.19**	.03	.06	.07
Marital roles	-.05	-.02	.04	-.06
Step 3				
Sex	-.01	.47†	-.08	.10
Ethnicity	.11*	.16***	.12**	-.08*
BMI	.01	-.42***	-.39***	.53***
Instrumentality	.04	.27***	.15**	-.19*
Expressivity	.08	.13†	.13†	.06
Inauthentic self in relationships	.11	-.07	-.18*	.01
Male antifemininity norms	.11	.12	.03	.14†
Female antimasculinity norms	.05	.05	.05	-.01
Marital roles	.09	-.07	-.05	.01
Instrumentality × sex	.04	-.11	.00	.03
Expressivity × sex	.03	-.10	-.03	.00
Inauthentic self in relationships × sex	.39	-.77**	-.41	.44†
Male antifemininity norms × sex	.03	-.09	-.17	-.26
Female antimasculinity norms × sex	.38*	-.01	.10	.23
Marital roles × sex	-.47**	.19	.35*	-.23
Step 1 R ²	.07***	.18***	.16***	.26***
Step 2 R ²	.16***	.32***	.29***	.32***
Step 3 R ²	.18***	.34***	.30***	.33***
ΔR ² (1–2)	.09***	.14***	.13***	.06***
ΔR ² (2–3)	.02†	.03*	.02	.02

Due to missing data, sample size ranged from $N = 422$ – 424 .

† $p < .07$

* $p < .05$

** $p < .01$

*** $p < .001$

(although the means for both were within normal range), it is likely that greater sociocultural pressure on women regarding appearance explains these differences. In addition, figure drawings were used to capture the direction of body dissatisfaction. Men and women differed significantly in the direction of their dissatisfaction. Similar to Cohn and Adler's (1992) findings, the women who were dissatisfied almost all wanted a smaller figure, whereas the dissatisfied men showed more variability in wanting to be smaller or larger. These findings suggest that thinness is more stringent in the female body ideal than in the male body ideal. It is also possible that, because the figure drawings do

not account for changes in muscle, it could reflect men's desire to be both smaller (i.e., have less body fat) and larger (i.e., have more muscle) to fit with the male body ideal of leanness and muscularity.

Ethnicity and Body Image

Results partially supported our hypothesis that African Americans would have a more positive body image than European Americans and Latino/a Americans. African Americans had a more positive evaluation of their appear-

ance than European Americans, a finding similar to that of others in the literature (Altabe, 1998; Miller et al., 2000). These group differences may be due to a broader range of acceptable body sizes for African American women, as well as cultural values that emphasize the body as a way to project individuality, style, and ethnic group membership (Parker et al., 1995; Rucker & Cash, 1992). Research on African American men indicates that they prefer larger female figures than do European American men (Freedman, Carter, Sbrocco, & Gray, 2004), which suggests that they share values with their female peers that promote acceptance of larger body types. However, there were no ethnic differences in body dissatisfaction as measured by the figure drawings, a finding similar to one study (Demarest & Allen, 2000), but different than another (Aruguete, Nickleberry, & Yates, 2004). African American students in the current study are at a predominantly European American university, and thus may have a smaller ideal body size that more closely resembles that of their European American peers (Aruguete et al., 2004). Unlike the MBSRQ, the figure drawings ask students to consider what is ideal for their bodies, rather than how they generally feel about their bodies. Thus, campus-wide ideals may play a more important role in students' responses to the figure drawings than to the MBSRQ. However, it is also possible that these differences existed prior to attending college. College is a commitment that requires significant financial responsibility, suggesting that those who attend are likely to be of higher socioeconomic status than their peers who do not attend, regardless of ethnicity. Researchers have shown that members of higher social classes are more likely to desire thinness (Drewnowski, Kurth, & Krahn, 1994).

Although European American and Latina American women were more oriented toward their appearance than were their male peers, there was no significant difference in appearance orientation between African American men and women. The African American men's scores were more similar to the women's scores than to other men's scores. More emphasis on appearance in African American men may represent their adaptation of 'cool pose' (Majors & Billson, 1992). This term refers to a set of attitudes and behaviors that convey calmness, strength, and toughness, a means of asserting masculinity in a society that impedes their access to the majority culture's traditional markers of success (Majors & Billson). In other words, appearance may be an important vehicle through which to express their identity (e.g., through distinct styles of dress) when faced with barriers to success. Women (as compared to men), and African Americans (as compared to European Americans) report more fashion innovativeness, fashion opinion leadership, and spending on new fashion (Stith & Goldsmith, 1989), which also supports our finding that all groups of women and African American men report more appearance orientation.

Gendered Personality Traits and Body Image

Our third hypothesis, that more masculine and less feminine individuals would report a more positive body image, was partially supported. We focus here on the regressions, as it is important to understand the contribution of each gender role development measure in the context of the other measures. As expected, individuals who were more instrumental reported more positive evaluations of their appearance, higher satisfaction with body areas, and lower body dissatisfaction. Our findings, like those of others (Hawkins et al., 1983; Jackson et al., 1988; Kimlicka et al., 1983), support the discrepancy theory (Steiner-Adair, 1986), which argues that low masculinity in women is associated with poorer body image. Because these findings held across both sexes, it is possible that this theory may extend to men. That is, less masculine men may have body image problems as a result of their perceived inability to meet social norms that encourage men to be masculine.

In contrast to predictions based on Bem's (1981) work, there was no association between expressivity and appearance orientation. Jackson et al. (1988) found an association between these constructs, but they categorized individuals (i.e., instrumental, expressive, androgynous, undifferentiated) rather than considering scores on continuous scales of instrumentality and expressivity. We chose the latter approach because it avoids the problem of establishing valid cut points for these groups, and, more important, it allows an understanding of how "pure" femininity operates—whether present in feminine or androgynous individuals—in relation to body image.

Although expressivity was not associated with appearance orientation, it did relate to body areas satisfaction. This finding was surprising considering that others have found no association between expressivity and evaluation of appearance or the body (Kimlicka et al., 1983; Timko et al., 1987). Given that those who were more instrumental were also more satisfied with their body areas, it is possible that androgyny may be important for protecting against dissatisfaction with particular body areas, rather than with appearance or the body as a whole.

We also found that women who were less inauthentic in their relationships had more positive evaluations of their appearance. Also, both men and women who were less inauthentic in relationships were more satisfied with areas of their body, and were less dissatisfied with their overall body. Inauthentic self in relationships and poor body image appear to share an underlying premise—insecurity about the self. Whereas being inauthentic in relationships may reflect a lack of confidence in revealing one's emotional and intellectual selves to others, having a poor view of one's body may indicate insecurity about revealing the physical self. These findings also show that inauthentic self in

relationships, an “appropriate” yet unhealthy feminine behavior, is a better predictor of body image than expressivity, a positive set of stereotypically feminine personality traits. These findings contrast with Boskind-Lodahl’s (1976) argument that excessive femininity may be associated with body-related problems, and suggest instead that only the negative aspects of what it means to be feminine may pose problems for body image.

Gender Role Attitudes and Body Image

Finally, results partially supported our hypothesis that individuals with more traditional gender role attitudes would report less positive body image. Results showed that these attitudes were more closely associated with appearance orientation than with other measures of body image, and were stronger for women than for men. Specifically, women who were more opposed to women acting in a masculine way were more oriented toward their appearance. This finding is similar to Cash et al.’s (1997) work with college women, as both studies indicate a stronger relation between more traditional beliefs about gender “appropriate” behavior in social interactions and being more oriented toward appearance, rather than more traditional attitudes about men’s and women’s roles in society and aspects of body image. It may be that women who prefer gender-typical behavior for themselves spend more time thinking about, and investing in, their looks so that they meet cultural expectations of what women should be. They may also be particularly sensitive to other women’s violations of gender role norms, as these violations would signal deviations from culturally appropriate behaviors, styles, and attitudes for women.

We did find associations between traditional attitudes about men’s and women’s roles and body image, but in a direction opposite to that predicted. Women with more traditional attitudes toward marriage were less oriented toward their appearance. It is possible that women with traditional attitudes toward marriage (e.g., men should make the important decisions in the family) may endorse the traditional belief that women should be self-sacrificing. In putting the needs of others first, these women may invest less energy and concern in their own appearance.

It is important to point out that these associations held for the orientation aspect of body image, rather than for the evaluative aspects. That is, women who oppose masculine behavior in women and who have less traditional attitudes toward marriage invest more in their appearance, but do not necessarily have more positive (or negative) attitudes toward their appearance. It should also be noted that there were fewer associations for gender role attitudes than for gendered personality traits, which suggests that attitudes toward gender may be less important than gendered characteristics or behaviors for understanding variation in body image.

Limitations and Conclusions

The current study had several limitations. First, conclusions about the direction of influence between gender role development and body image cannot be made. Endorsement of certain gendered personality traits or gender role attitudes might cause individuals to feel a certain way about their appearance, but it is also possible that body image might cause individuals to adopt certain traits and attitudes that pertain to gender. In the future, longitudinal studies could be used to begin to explain directionality between these correlates. Second, the reliability on the ISR was fairly low for men. However, the fact that it was associated with body image in men and women in similar ways suggests that it does have meaning for men. Third, the figure drawings used to assess body dissatisfaction changed incrementally only by weight, but not by muscle. Had these figures accounted for changes in muscle mass, it is possible that sex differences in body dissatisfaction might have disappeared. On the other hand, significant sex differences were found with other measures of body satisfaction, which suggests that these differences may indeed be somewhat robust.

Despite these limitations, the current study makes some important contributions to the literature on body image. We included both men and women, as well as individuals from understudied ethnic minority groups, particularly Latino/a Americans. The study highlights the importance of considering both sex and ethnicity, as well as specific, rather than unidimensional, measures of traits and attitudes to examine associations with body image. Because prior researchers have focused on the relation between discrete components of gender role development and body image (e.g., gendered personality traits only), this study provides an important step in understanding how multiple aspects of gender role development relate to body image. Results show that gendered personality traits, particularly positive masculine traits (i.e., instrumentality) and negative aspects of femininity (i.e., inauthentic self in relationships) are better predictors of body image than are gender role attitudes. Thus, results suggest that personality qualities are more important for understanding body image than are more general attitudes toward gender.

In this study we took a contextual approach to understanding body image and its associations by examining individuals during an important developmental period—the transition to college. During this transitional time, students may develop attitudes toward gender and their bodies that may persist throughout their adult lives. On university campuses, attitudes are cultivated by groups that dwell on the importance of appearance for personal or professional success and by residence in a co-educational environment, which may heighten appearance-related competition among peers and increase physical self-consciousness. Given these

challenges inherent during the transition to college, body image disturbance may emerge. Such disturbance is a problem that can compromise individuals' health, confidence, and happiness, and might ultimately lead to eating disorders. To prevent and/ or minimize body-related disturbance, it is important to first understand the processes that underlie it.

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