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ORIGINAL ARTICLE

Gender Differences in Correlates of Homophobia and Transphobia

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Abstract A scale of prejudice against transgender individuals was developed, validated, and contrasted with a homophobia measure in 153 female and 157 male US college undergraduates. For both sexes, transphobia and homophobia were highly correlated with each other and with right-wing authoritarianism, religious fundamentalism, and hostile sexism, but aggression proneness was predictive of transphobia and homophobia only in men. Benevolent sexism and rape myth acceptance were more predictive of transphobia and homophobia in women than men. With homophobia partialled out, authoritarianism, fundamentalism, and aggression proneness no longer predicted transphobia for men, but authoritarianism, fundamentalism, benevolent sexism, and rape myth acceptance continued to predict transphobia in women. Discussion focused on gender differences in issues that drive prejudice against transgender and homosexual individuals.

Keywords Homophobia · Transphobia · Sexism · Gender differences

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Introduction

The present paper reports on the validation of a new short measure of transphobia in a heteronormative college student sample, with scale validation being based on known, theoretically relevant correlates of a well-established scale of homophobia (Wright et al. 1999). These correlates included right-wing authoritarianism, religious fundamentalism, masculinity and femininity, hostile and benevolent sexism, rape myth acceptance, and aggression proneness. Scale validation then considered differences between the correlates of homophobia and transphobia, as well as gender differences in these correlates.

Defining Transphobia

Hill (2002) defines transphobia in terms of "emotional disgust toward individuals who do not conform to society's gender expectations" (Hill and Willoughby 2005, p. 533), a definition that is consistent with Weinberg's (1972) definition of homophobia as the irrational fear, hatred, and intolerance of being in close quarters with homosexual men and women. Hill (2002) then goes on to conceptualize prejudicial and discriminatory behavior towards transgenders in terms of genderism and gender bashing. Such discriminatory behavior can also be considered as part of transphobia, hence, Sugano et al.'s (2006) definition in terms of "societal discrimination and stigma of individuals who do not conform to traditional norms of sex and gender" (p. 217). Transphobia contrasts with homophobia in not only being about revulsion and irrational fears of transgenders and transsexuals, but also cross-dressers, feminine men, and masculine women (Weinberg 1972), i.e., in being about larger issues of gender roles and gender identity and not just sexual orientation.

Gender identity has been described as an individual's internal sense of self as being, male, female, or an identity between or outside these two categories (Wilchins 2002). According to Bornstein (1994), gender identity is what we feel our gender should be, male or female, at any given moment. Gender roles are what the culture thinks one should do with one's life, such as qualities, mannerisms, duties, and cultural expectations, according to a specific gender (Bornstein 1998). One's sexual orientation, to whom we are sexually attracted, depends on the gender identity of our sexual partners (Bornstein 1994).

While there is an established literature on homophobia, transphobia is still an understudied area. Furthermore, transgendered individuals are often not distinguished in the LGBT literature from gays, lesbians, and bisexuals, thus not distinguishing between issues of gender identity, gender roles, and sexual orientation. Transpeople (Green 2005) is a term that envelopes two different groups of people. The first are transgenders and the second are transsexuals. Transgenders are people living in a gender identity different from traditional heteronormative definitions, but who have little intention or no intention of having genital surgery (Bornstein 1994). Transgenders are individuals who violate norms of gender roles and gender identity and/or go across the boundaries of one gender to another gender (Green 2004). Transsexuals intend to or have had hormonal and surgical sex reassignment and can be either pre-transition/operative, transitioning/in the process, or post-transition/operative (Hird 2002).

Prejudice and discrimination against LGBT individuals are well-established phenomena, even in theoretically more tolerant college environments. Rankin (2005) described the generally negative perception LGBT individuals have for their campus' climate of sexual minority acceptance. In their study, many LGBT students described experiencing harassment on their college campuses, and most of those attending or employed by the university described their general campus climate as "homophobic." Like public and private 4-year universities, community colleges also have much progress to make in the improvement of college climate. Ivory (2005) noted that community colleges have been slower in their development of support programs for LGBT students.

Experiences of prejudice and discrimination may be even worse for transgender individuals. Lombardi et al. (2001) examined the difficult aspect of transgenders coming out, as well as their day-to-day life experiences. Throughout their lifetime, over half of the transgender sample had fallen victim to either violence or harassment, and almost 40% of the sample had experienced economic discrimination of some type. Beemyn et al. (2005) also focused specifically on difficulties encountered by transgender persons on college campuses, which are often just as—if not more so—numerous as those difficulties faced by LGB students. By addressing important, yet difficult to control, aspects of transgender life (such as restroom use, health care, and the choice to change gender on official university documents), Beemyn et al. suggested ways to develop and manage policies that would increase the ease with which trans students and staff could navigate these all too common obstacles.

Over 20 years ago, Leitenberg and Slavin (1983) compared attitudes toward transsexuals and homosexuals among straight-identifying (i.e., heteronormative) university students. They surveyed 318 university students, asking questions about general attitudes toward and beliefs about, job discrimination of, biological causality of, and child adoptions by homosexual and transsexual individuals. The researchers found that more students felt that homosexuality was wrong compared to transsexuality, with women being more favorable toward transsexuals than males.

Measuring Transphobia

Recently, Hill and Willoughby (2005) developed and validated a 32-item transphobia and genderism scale to measure emotional disgust, violence, harassment, and discrimination towards transgenders, transsexuals, and cross-dressers. In the last of three studies, the new Genderism and Transphobia Scale was administered to 180 undergraduate and graduate students with results that found large amounts of intolerant attitudes toward people with gender variance. The new scale was significantly positively correlated with the homophobia scale of Wright et al. (1999), a variant of Herek's (1987) Attitudes Towards Lesbians and Gays scale, and traditional gender role beliefs (Kerr and Holden 1996), but was not correlated with self-esteem nor with masculinity and femininity as measured by the Bem Sex Role Inventory (Bem 1973).

Hill and Willoughby (2005) are to be commended for breaking new ground in developing a transphobia scale. There are, however, a number of psychometric problems with the scale, as well as gaps in establishing the construct validity of the measure. In terms of psychometric properties, Hill and Willoughby intended their scale to measure not just transphobia, but also genderism (negative evaluation of gender non-conformity) and gender bashing (assault/harassment of gender non-conformists). The three resulting subscales of their 32-item measure, however, were not developed through factor-analytic procedures. The extremely high intercorrelations among the transphobia, genderism, and gender bashing subscales (ranging from .73 to .84), which were confirmed in factor analyses of the scale items with the later college student sample, suggest that there is no discriminant validity between these subscales. It is likely that a much shorter and tighter measure

would capture all of the relevant variance of the Hill and Willoughby scale.

The constructs chosen by Hill and Willoughby to validate the scale were based on an etiological theory of transphobia that emphasized adherence to traditional gender roles and sexual orientation, as well as lack of familiarity with transgenders, but the literature cited below with regard to homophobia and social prejudices, in general, suggest a wider range of validating constructs that could have been used. While finding a high degree of overlap between transphobia and homophobia, the authors did not assess the discriminant validity of their transphobia scale relative to homophobia, nor did they consider gender differences in the predictors of transphobia, in spite of the research literature (discussed below) showing important gender differences in the predictors of homophobia. The present scale construction and validation thus builds on the previous work of Hill and Willoughby (2005).

Rather than starting with a pool of 150 items and then using iterative procedures to whittle down to a final scale, as was done for the Hill and Willoughby (2005) scale, the nine items of the present Transphobia Scale were specifically focused on attitudes towards what Bornstein (1994, 1998) considers to be the key issue of transgenderism, the fluidity of gender identity and how deviations from expected heteronormative manifestations of gender identity fundamentally challenge individuals' sense of self. These nine items were adapted from Bornstein's (1998) *My Gender Workbook* flexibility of gender aptitudes (pp. 9–10) questions, which assess a person's degree of discomfort when encountering individuals who don't conform to conventional gender norms. Bornstein's items clearly are reflective of the range of experiences encountered as a transgender individual interacting with heteronormative individuals.

Validating Constructs and Homophobia

Given the large literature on predictors of homophobia, as well as the expectation that transphobia would be highly correlated with homophobia, validating measures for the present transphobia scale were chosen based on the homophobia literature. In terms of developing a measure of individual differences in homophobia, O'Donohue and Caselles (1993) proposed three types of reactions one can have, emotional, intellectual/cognitive, and behavioral, to homosexuality and homosexuals. In this context, the homophobia scale of Wright et al. (1999) included 25 items that assessed negative cognitions regarding homosexuality, negative affect and avoidance of homosexual individuals, and negative affect and aggression toward homosexual individuals.

Stephan and Stephen's (2000) Integrated Threat Theory of Prejudice stresses that prejudice is caused by intergroup threats and fears that may be realistic or symbolic, that reflect intergroup anxieties in interactions, or that result from negative stereotypes of the outgroup. The literature on the correlates of homophobia suggests that anxiety produces a specific prejudice against homosexuals, particularly for men, while negative stereotypes produce a more general prejudice against a range of outgroups. It should be noted that this research on correlates of homophobia has almost exclusively employed college student samples from the USA and Australia, which limits the generalizability of the findings in several ways. Nevertheless, the research reviewed below on such correlates should provide insight on sources of prejudice that would also be relevant for understanding prejudice against transgender individuals.

Using their scale, Wright et al. (1999) found that men scored significantly higher than women on homophobia, a consistent finding from other studies (Cullen et al. 2002; Hopwood and Connors 2002; Polimeni et al. 2000) using earlier measures of negative attitudes toward homosexuals, such as the Assessment of Attitudes Toward Lesbians and Gay Men (Herek 1984). Wright et al. also found that the higher the level of education a person achieved, the lower their likelihood of being homophobic, this correlation having little to do with the increase of age along with education level. This finding for education will be further explored below.

In a study by Bernat et al. (2001), men were targeted as the group already predisposed to homophobia, and the measurement and the character and intensity of male aggression against homosexuals became the study's primary focus. This experiment found that anxiety and anger-hostility greatly increased among homophobic males who were exposed to homosexual cues in the laboratory setting, whereas a non-homophobic group of males experienced significantly smaller increases in anger-hostility after being exposed to the same cues. It would be important to understand the bases for this anger in homophobic men and to contrast the findings with women. These findings, and the hypermasculinity findings discussed below, also suggest that individual differences in proneness to aggression may be predictive of homophobia primarily in men.

Parrott et al. (2002) suggest that homophobia in men may not reflect necessarily negative sentiments specifically against homosexual males. Instead, homophobia may include more general negative attitudes toward feminine characteristics. Homophobia-related aggression may not be due to men's moral injunctions against homosexuality, but rather may be the individual's negative behavioral expression, when the presence of homosexual stimuli evoke threats to masculine identity. As also reported by others (Patel et al. 1995; Sinn 1997), a positive relationship has been found between hypermasculinity and homophobia. More specifically, endorsement of violence as a manly

attribute, callous sexual beliefs, and finding danger exciting was found to be positively correlated with homophobia (Parrott et al. 2002). Again, there is a need to contrast these findings for men with homophobia in women.

Whether more general adherence to traditional gender roles in general is predictive of homophobia is more controversial. Stevenson and Medler (1995) found that more sexist beliefs were predictive of greater homophobia, while Theodore and Basow (2000) found that perceiving oneself as fitting traditional gender roles and seeing them as being important were predictive of homophobia in men. Basow and Johnson (2000), however, found that fitting traditional gender roles was not predictive of greater homophobia in women, while beliefs in more egalitarian gender roles was predictive of lesser homophobia. Polimeni et al. (2000) also found that traditional gender role beliefs were predictive of homophobia in men but not women. Meanwhile, Schope and Eliason (2004) presented respondents with vignettes of encountering individuals manifesting gay-vs. straight-acting behaviors and found that it was the homosexuality of the target person and not the gender role-deviant behaviors that sparked homophobic responses.

Rape myth acceptance has also been consistently found to be predictive of homophobia (Kassing et al. 2005; Stevenson and Medler 1995). Such myths are defined by attitudes/beliefs that shift the blame for sexual assault and sexual violence from the perpetrator to the victim. Belief in such rape myths may also reflect a sexism that upholds traditional gender roles and the subordination of women. It is noteworthy, however, that Aosved and Long (2006) found that racism, sexism, homophobia, ageism, classism, and religious intolerance were all correlated with greater rape myth acceptance for both men and women. This may be due to the more general socialization of some individuals into rigidly intolerant "conservative" attitudes against any outgroups that do not conform to a set of "traditional" norms for social behavior. Such socialization is associated with lower education, right wing authoritarianism, and religious fundamentalism.

The finding of Wright et al. (1999) that lower education was associated with greater homophobia is consistent with numerous studies showing that lower education is associated with a range of prejudices against social outgroups (Sullivan et al. 1985). Lower education, in turn, is associated with right wing authoritarianism, defined as the combination of submission to government authority, approval of authoritarian aggression to maintain social order, and conventional social beliefs (Altemeyer 1981), which is also predictive of a range of prejudices against social outgroups (e.g., Heaven et al. 2006). Altemeyer and Hunsberger (1992) found that people who were high on the Right Wing Authoritarianism scale (RWA) showed a much greater dislike for homosexuals. Similarly, studies have found that religious fundamentalism, defined as a close-minded, ethnocentric mindset with a general tendency to discriminate (Glock and Stark 1966), is correlated with measures of discrimination toward homosexuals (Glock and Stark 1966; Hopwood and Connors 2002; Kirkpatrick and Hunsberger 1990; McFarland 1989). In contrast to the findings for gender role-related variables, gender differences have not been found for the correlations of authoritarianism and religious fundamentalism with homophobia. Consistent with the general literature on prejudice, homophobia has been found to be reduced in individuals with greater openness to experience (Cullen et al. 2002), as measured by the NEO Personality Inventory (Costa and McCrae 1985), with greater empathic concern and perspective taking (Johnson et al. 1997), and who have greater contact with outgroup members, in this case, homosexuals (Basow and Johnson 2000; Cullen et al. 2002).

Validation of the New Transphobia Scale

While homophobia and transphobia clearly have some commonalities, it should be pointed out that homophobia is theoretically about a non-normative sexual orientation, with the challenge to normative gender roles a secondary effect. Transphobia, on the other hand, is specifically about challenging normative gender roles and gender identity.

The present transphobia scale was tested for internal consistency and stability through factor analytic and test-retest procedures. Construct validation included correlating the new scale with predictors drawn from the literature discussed above, testing to ensure that the scale did not correlate with other irrelevant constructs, testing the discriminant validity of the scale relative to homophobia, and testing for gender differences in the correlates of transphobia. Significant correlates of the new Transphobia Scale were expected to be similar to those for homophobia, with some exceptions noted below. For the validation of the present transphobia scale, predictive measures for both homophobia and transphobia were chosen to cover specific aspects of gender and gender role beliefs, including own masculinity–femininity (Personal Attributes Questionnaire; Spence et al. 1975), benevolent and hostile sexism (Ambivalent Sexism Inventory; Glick and Fiske 1996), sexual restrictiveness vs. permissiveness (Sociosexuality Inventory; Simpson and Gangestad 1991), rape myth acceptance (Rape Myth Acceptance Scale; Burt 1980), and "hypermasculinity," as reflected in proneness to aggressive behavior (Aggression Questionnaire, particularly the physical aggression and anger subscales reflective of the endorsement of violence as a manly attribute; Buss and Perry 1992). Predictive measures were also chosen to tap into more general sources of prejudice, including Right Wing Authoritarianism (Altemeyer 1981) and Religious Fundamentalism (Altemeyer and Hunsberger 1992).

It was expected that both transphobia and homophobia would be positively correlated with right-wing authoritarianism, religious fundamentalism, benevolent sexism, rape myth acceptance, and a more restricted sexuality for both men and women (Hypothesis 1), presumably due to the degree of socialization of individuals into traditional social norms. Another source of homophobia is a hypermasculinity (Bernat et al. 2001) that manifests as aggression proneness and hostile sexism. It was thus hypothesized (Hypothesis 2) that aggression proneness, particularly for physical aggression and anger, and hostile sexism would correlate with homophobia and transphobia in men, but not women. Given, however, that transphobia, in contrast to homophobia, is specifically about gender identity, we would also expect (Hypothesis 3) that transphobia would be more correlated with measures of beliefs in traditional gender roles and identity (benevolent sexism and rape myth acceptance) than would be the case for homophobia. Lastly, besides the expected higher scores for transphobia and homophobia in men compared to women, it was hypothesized (Hypothesis 4) that there would be gender differences in the issues that drive prejudice against transgender and homosexual individuals, for example, that beliefs in traditional gender roles (again, benevolent sexism and rape myth acceptance), beyond their effects on homophobia, would be more correlated with transphobia in women compared to men.

Method

Participants

Undergraduate student participants were recruited from introductory psychology courses offered at Arizona State University, completed the questionnaire described below in group testing sessions, and were given research credits for their participation in partial completion of course requirements. Three hundred ten students (153 female, 157 male) completed the questionnaire. The mean age for females was 19.45years (SD = 3.28) and for males 19.47years (SD = 1.76). The ethnic group breakdown was 75% white, 12% Hispanic, 5% Asian, 2% African-American, 2% Native American, and 4% other. Thirty-five percent of the sample reported themselves as being Catholic, 32% Protestant or "other Christian", 5% Jewish, 3% Mormon, 12% "other", and 14% atheist or agnostic. Nearly all of the participants reported themselves as being "straight", with two each reporting themselves as being "gay/lesbian," "bisexual," or "other."

Materials

Obtained demographic information included gender, age, ethnicity, religion, and sexual orientation.

The following measures (Cronbach's alpha calculated on the present sample) were included in the questionnaire, with higher scores on the scales representing higher levels of the construct being measured (Table 1 provides the scale endpoints):

Transphobia Scale

The nine items of the scale (Appendix 1) were meant to measure prejudice against transgender individuals and were adapted from items on Flexibility of Gender Aptitude from Bornstein's *My Gender Workbook* (Bornstein, 1998, pp. 9–10). Items were responded to on a scale from 1 = "completely disagree" to 7 = "completely agree."

The Cronbach's alpha reliability coefficient obtained for the new Transphobia Scale was .82, which indicated that the scale had high internal consistency, i.e., that the nine items on the scale were conceptually homogeneous, all tapping the same construct. Principal components analyses of the nine Transphobia Scale items yielded an unrotated first principal component with an eigenvalue of 3.97 that accounted for 44% of the variance and only one other component with an eigenvalue greater than 1.0. Factor loadings on the first principal component were .42 or higher for all items except item 6, which loaded .18. Varimax rotation of these two components yielded a two-factor structure in which item 6 uniquely loaded on its own factor, but the large alpha coefficient and the large amount of variance accounted for by the first principal component otherwise supported the unidimensionality of the measure. Removal of item 6 only increased the alpha to .85, all of the other items were positively correlated with item 6, and the content of item 6 was part of Bornstein's (1998) conceptualization of prejudice against transgender individuals, as well as Hill's (2002) conceptualization of genderism. All subsequent analyses were thus based on scale scores computed by averaging all of the items on the scale.

The test-retest stability of the Transphobia Scale was established by a sample of 27 students drawn from upper-division psychology classes and administered the scale at two time points separated by 4 weeks. The test–retest stability correlation was .88.

The Homophobia Scale (Wright et al. 1999) consists of 25 items (α = .95) assessing a person's degree of prejudice against homosexuals, with items responded to on a scale from 1 = "completely disagree" to 5 = "completely agree."

Right-wing authoritarianism (Altemeyer 1981; α = .80) reflects a belief in submission to authority, the legitimacy of aggressive actions by authority, and conventional social norms.

Religious Fundamentalism (Altemeyer and Hunsberger 1992; α = .95) reflects adherence to a centralized religious

belief system that is fundamental for existence, represents a special relationship with God, and must be strictly adhered to in opposition to the forces of evil.

The Personal Attributes Questionnaire (PAQ; Spence et al. 1975) contains separate scales of traditionally defined femininity (α = .77) as emotional expressiveness and masculinity (α = .75) as instrumentality.

The Ambivalent Sexism Inventory (Glick and Fiske 1996) measures hostile sexism (α = .83), prejudice against women and women's rights, and benevolent sexism (α = .79), reflecting a positive view of women only as they fit into traditional gender roles.

The Rape Myth Acceptance Scale (Burt 1980) assesses the endorsement of attitudes supportive of sexual coercion and aggression. Given the different types of items and response formats on this measure, scores for the present study were based on averaging the first 11 items (α = .80), which have a "strongly disagree" to "strongly agree" response format.

The Sociosexuality Inventory (Simpson and Gangestad 1991; α = .88) assesses a person's actual and desired number of sexual partners and experiences, with higher scores indicative of greater sexual permissiveness/promiscuity.

The Aggression Questionnaire (Buss and Perry 1992) measures several dimensions of proneness to aggressive behavior and hostile cognitions, including physical aggression (α = .85), verbal aggression (α = .73), anger (α = .82), and hostility (α = .83).

The questionnaire also contained measures of impulsivity and sensation seeking (Eysenck et al. 1985a), neuroticism (Eysenck et al. 1985b), self-esteem and social dominance (Helmreich and Stapp 1974), locus of control (Levenson 1981), and self-monitoring (Snyder 1974) that were not theoretically expected to be correlated with transphobia or homophobia and for the most part, did not correlate with these latter measures. This divergent validity further establishes the construct validity of the new Transphobia Scale.

Results

Table 1 presents the means and standard deviations separately by gender for the transphobia, homophobia, right-wing authoritarianism, religious fundamentalism, PAQ femininity–masculinity, ambivalent sexism, rape myth acceptance, sociosexuality, and Buss–Perry aggression measures. A MANOVA indicated that there were significant gender differences on these measures, even when controlling for the number of comparisons (multivariate F (14, 200) = 13.36, p < .001). Men scored significantly higher than women on transphobia, homophobia, masculinity, hostile sexism, rape myth acceptance, sexual permissiveness, and physical aggression proneness, while women scored higher on femininity.

Table 2 presents the correlations separately by gender of the transphobia and homophobia scales with right-wing

Table 1 Means and standard deviations by gender.

Scale	Females		Males		t
	Mean	SD	Mean	SD	
Transphobia (1–7)[a]	4.25	1.20	5.05	1.01	−6.19***
Homophobia (1–5)	1.68	.69	2.66	.83	−11.19***
Rt.–Wg. authoritarianism (−3 to +3)	.26	.69	.40	.69	−1.80
Relig. fundamentalism (−4 to +4)	−.62	1.39	−.36	1.38	−1.68
Personal attributes ques.					
Femininity (1–5)	2.96	.54	2.69	.55	4.28***
Masculinity (1–5)	2.47	.54	2.65	.63	−2.61**
Ambivalent sexism					
Hostile (0–5)	2.22	.79	2.90	.70	−7.76***
Benevolent (0–5)	2.64	.82	2.81	.70	−1.83
Rape myth acceptance (1–7)	2.72	.78	3.34	.99	−5.91***
Sociosexuality (z score)	−.30	.63	.29	.77	−7.22***
Buss–Perry aggression					
Physical aggression (1–5)	2.27	.77	3.07	.85	−8.63***
Verbal aggression (1–5)	3.00	.77	3.12	.77	−1.34
Anger (1–5)	2.35	.72	2.55	.82	−2.37*
Hostility (1–5)	2.42	.80	2.64	.81	−2.49*

Multivariate $F(14,200)=13.36$, $p<.001$

[a] Scale endpoints in parentheses; higher scores indicate having more of the attribute.

*$p<.05$

**$p<.01$

***$p<.001$

Table 2 Correlations of transphobia and homophobia with validating measures.

Scale	Females			Males		
	Transphobia	Homophobia	Transphobia[a]	Transphobia	Homophobia	Transphobia[a]
Homophobia	.56***			.56***		
Rt.–Wg. Authoritarianism	.49***	.34***	.40***	.42***	.52***	.10
Religious Fundamentalism	.54***	.54***	.34***	.28***	.47***	−.01
Personal attributes ques.						
Femininity	−.04	.06	−.08	−.14	−.23**	.01
Masculinity	−.11	.03	−.15	.06	.00	.08
Ambivalent sexism						
Hostile	.22**	.24**	.12	.26**	.21*	.15
Benevolent	.42***	.21*	.38***	.25**	.13	.21*
Rape myth acceptance	.35***	.22**	.29***	.08	.29***	−.12
Sociosexuality	.00	−.18*	.10	−.01	−.07	.04
Buss–Perry aggression						
Physical aggression	.04	−.01	.06	.25***	.32***	.05
Verbal aggression	.01	−.06	.04	.20*	.15	.12
Anger	.04	.08	.00	.21**	.25**	.06
Hostility	.05	−.01	.06	.15	.18*	.05

[a] Transphobia scores with homophobia partialed out.
*$p<.05$
**$p<.01$
***$p<.001$

authoritarianism, religious fundamentalism, femininity, masculinity, benevolent and hostile sexism, rape myth acceptance, sexual permissiveness, and aggression proneness. As expected, transphobia was highly correlated with homophobia for both sexes, but there was still a considerable amount of unshared variance. For both sexes, consistent with Hypothesis 1, both transphobia and homophobia were significantly and highly correlated with right-wing authoritarianism, religious fundamentalism, and hostile sexism, indicating that a large part of what drives these prejudices are possibly socialization experiences emphasizing "traditional," "conservative" social values. The gender differences in the other significant correlations, however, suggest other causal processes. A more restrictive sexuality, as measured by the Sociosexuality Inventory, was correlated with homophobia only in women. Consistent with Hypothesis 3, benevolent sexism, reflective of supporting traditional gender roles, was more correlated with transphobia than homophobia, but this was particularly the case for women (the correlation of .42 of benevolent sexism with transphobia in women was significantly higher than the correlation of .21 of benevolent sexism with homophobia, Fisher's $z = 2.03$). While rape myth acceptance was correlated with homophobia for both sexes, it was only correlated with transphobia in women, again possibly reflecting beliefs in traditional gender roles. Finally, aggression proneness, but not masculinity, was associated with transphobia and homophobia only for men (the correlation of .32 of physical aggression proneness with homophobia for men was significantly higher than the corresponding correlation of −.01 for women, $z = -2.98$; the corresponding gender difference in the correlations of physical aggression proneness with transphobia were near significant, $z = -1.88$), with lower femininity predictive of homophobia also only for men (supportive of Hypothesis 2). Note that the Buss–Perry subscales that were particularly associated with male homophobia were physical aggression and anger, dimensions that consistently show male-biased gender differences, as opposed to the lack of gender differences found for indirect aggression (verbal aggression and hostility; Archer 2004).

Table 2 also presents the partial correlations of right wing authoritarianism, religious fundamentalism, femininity, masculinity, hostile and benevolent sexism, rape myth acceptance, sexual permissiveness, and aggression proneness with transphobia controlling for homophobia. For males, the correlations of authoritarianism, fundamentalism, and aggression proneness with transphobia were greatly attenuated, once homophobia was controlled for, suggesting that male prejudice against both homosexuals and transgender individuals is driven by the same causal factors. In contrast, for women the correlations of authoritarianism, fundamentalism, benevolent sexism, and rape myth acceptance remained mostly unchanged, when homophobia was controlled for, suggesting somewhat different causal factors at work for prejudice against homosexuals versus prejudice against transgender individuals (supportive of Hypothesis 4). In fact, the correlation of .38 of rape myth acceptance with

transphobia, controlling for homophobia, for women was significantly higher than the corresponding correlation of −.12 of rape myth acceptance with transphobia for men ($z = 3.65$), while the correlation of .38 of benevolent sexism with transphobia, controlling for homophobia, for women was near-significantly higher than the corresponding correlation of .21 of benevolent sexism with transphobia for men ($z = 1.63$).

Hierarchical multiple regression analyses (Table 3) were conducted as a further test of the proposed theory of the etiologies of homophobia and transphobia. To reiterate, this theory proposes that for both men and women social conventionalism produces prejudices against any socially non-conforming groups, including homosexuals and transgenders. A second source of prejudice only in men is a hypermasculinity that reflects a fear of loss of male social power for any deviations, whether of gender roles, gender identity, or sexual orientation, in traditionally male gender attributes. A third proposed source of prejudice only against transgenders, particularly for women, is the fear of loss of social power specifically associated with deviations from traditional gender roles. Since the measured indicators of these sources of prejudice, right-wing authoritarianism, religious fundamentalism, proneness to physical aggression, benevolent sexism, and rape myth acceptance, are correlated with each other, hierarchical multiple regression is an appropriate statistical procedure for assessing the independent effects of putatively causally subsequent predictors over causally prior predictors in the presence of shared variance among the predictors (Cohen et al. 2003, pp. 158–159).

The hierarchical regression model (Table 3) was built by first entering authoritarianism and fundamentalism (which correlated .55 with each other in women and .67 in men) as a block representing the causally prior effects of general social conventionalism. The second step of the model was to enter Buss–Perry physical aggression, indicative of hypermasculinity, to test its incremental effect over and above the effects of authoritarianism and fundamentalism. The third step to the model was to finally enter benevolent sexism and rape myth acceptance (which correlated .24 with each other in women and .08 in men), indicative of adherence to traditional gender roles, into the model to test the incremental effects of these variables over and above the other predictors. These analyses were run separately for men and women and for transphobia and homophobia. Tolerances for all entered variables were well above .10, indicating that multicollinearity among the predictors was not so high as to cause the correlation matrices to become singular (Tabachnik and Fidell 2007, pp. 89–90). As shown in Table 3, the results were highly consistent with the proposed theory of the etiology of prejudice against homosexuals and transgenders. Authoritarianism and religious fundamentalism were highly predictive of both transphobia and homophobia in both men and women. Over and above these effects, hypermasculinity was a significant predictor of homophobia and transphobia only in men. Finally, over and above the effects of authoritarianism, fundamentalism, and aggression proneness, rape myth acceptance and benevolent sexism were significantly

Table 3 Hierarchical multiple regressions of transphobia and homophobia on authoritarianism, religious fundamentalism, sexism, rape myth acceptance, and aggressivity.

	Transphobia			Homophobia		
		Multiple	R^2		Multiple	R^2
	Beta[a]	R	Change	Beta[a]	R	Change
Females						
Authoritarianism	.13			.03		
Religious fundamentalism	.36	.58	.34***	.49	.52	.27***
Physical aggression	.00	.58	.00	−.05	.53	.00
Benevolent sexism	.21			.00		
Rape myth acceptance	.15	.62	.05**	.10	.54	.01
Males						
Authoritarianism	.34			.39		
Religious fundamentalism	.02	.43	.18***	.19	.58	.34***
Physical aggression	.14	.46	.03*	.21	.63	.06***
Benevolent sexism	.22			.03		
Rape myth acceptance	.00	.50	.04*	.14	.65	.02

[a] Beta for final equation
*$p<.05$
**$p<.01$
***$p<.001$

predictive of transphobia but not homophobia, with the effects being a little stronger for women than for men.

Discussion

The present results support the internal consistency and convergent, discriminant, and construct validity of the new Transphobia Scale. Consistent with previous research, men scored significantly higher than women on both homophobia and transphobia. Similar to what has been found for homophobia, for both men and women, transphobia was found to be highly correlated with socially conservative attitudes emphasizing adherence to rigid conventional social norms. However, adherence to traditional social norms specifically about gender roles predicted transphobia but less so homophobia in women, while predicting both transphobia and homophobia in men. One interpretation of this latter finding is that sexual orientation is less of an issue for gender identity for women than it is for men. This may also be reflected, as well, in the findings on aggression proneness.

Consistent with previous research on homophobia (Bernat et al. 2001), hypermasculinity, as reflected in aggression proneness, but not PAQ masculinity, was highly correlated with both transphobia and homophobia, even when controlling for the effect of conventional socialization, in men but not women. It can be hypothesized that some men's anxieties about their masculinity are activated when these men are confronted with non-traditional gender manifestations, whether of gender identity, gender roles, or sexual preference. This anxiety, in turn, appears to promulgate both transphobia and homophobia.

Hamilton (2007) summarizes previous theoretical formulations that suggest that male prejudice against homosexuals is about encouraging heteronormative ideals of manhood in order to maintain dominance over women. Norton (1997), for example, proposes that what men fear is that, once you are able to feminize the male sex, then one would be able to form a feminization of all men, which breaks down the traditionally clear distinction between the superior male and the inferior female. This particularly became an issue in the late nineteenth and early twentieth century, when working men becoming disempowered by the feminization of culture and the working man's incorporation within capitalist systems of production. Norton makes the case that sex/gender and sexuality in the nineteenth and twentieth century became "mutually determinative constructs," with sexuality taking on its meaning in terms of sex/gender, and sex/gender elaborating itself as sexuality. To maintain traditional ideas of male superiority, one had to also adhere to traditional ideas of masculine behaviors and appearance and a heterosexual orientation. Thus, for men, beliefs about gender roles, gender identity, and sexual orientation, and the use of violence and aggression to maintain power, are all driven by a common ideology, which could explain the lack of differentiation in predictors of homophobia and transphobia for men found in the present study. This is also consistent with Bettcher's (2007) idea that transphobia in men arises from the anger felt by straight men over being "deceived" by male-to-female transgender individuals about the latter's actual sexed body, i.e., genitals, and the subordinate power relationship expected from having a female body.

In contrast, Hamilton's (2007) interpretations of her interview findings from college women suggest more complicated motivations for homophobia in women, whose gender roles, gender identity, and sexual orientation serve different functions for competing in a society dominated by male ideals and norms. Hamilton found that straight college women were ambivalent about lesbians, who were regarded as being of lower social status, since they did not compete with straight women for the attention of men. At the same time, straight women were aware of the attractive value of fulfilling male lesbian fantasies. Gender roles were a separate issue from sexual orientation, with Hamilton's respondents ambivalent about the need to play traditional female roles in order to attract men. Thus, consistent, with the findings from the present study, prejudice based on sexual orientation rested on a different ideology from prejudice based on gender roles and gender identity for women.

The present findings highlight the need for further research on transphobia and homophobia to clearly differentiate between the threats to heteronormative identity posed by deviations in gender roles vs. gender identity vs. sexual orientation. By more fundamentally challenging heteronormative assumptions about the nature of self-identity, transgender individuals may be more of a threat to self-identity than homosexuals, particularly for men. More research is needed on what specific aspects of non-conventional gender roles, gender identity, and/or sexual orientation evoke prejudicial emotions, cognitions, and behaviors, as well as how these triggers differ in men and women, in order to develop more effective environmental interventions to reduce transphobia and homophobia. There is also a need for research that addresses how lack of education, religious beliefs, and/or strictly obeying social norms leads to prejudice against LGBT individuals. The expectation that men need to show hypermasculinity in order to prove that they are secure with their gender identity and identity in general is a concern that needs to be addressed.

In terms of limitations, findings for the college student sample used in the present study may not generalize to non-college student populations and to non-Western cultures. College students are nevertheless an important population to study, since they are more likely to regularly

encounter LGBT individuals in the ostensibly more tolerant college campus environment. The importance of religious fundamentalism in predicting a range of social prejudices in Western societies would clearly not be expected to hold true in societies where religious and cultural norms emphasize more tolerance or a different set of discriminated against groups. The cross-sectional nature of the study precludes proving causality. It would have been useful to directly compare the Transphobia Scale with Hill and Willoughby's (2005) Genderism and Transphobia Scale and to validate both scales against more behavioral measures of transphobia.

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Appendix 1. Items for the Transphobia Scale

1. I don't like it when someone is flirting with me, and I can't tell if they are a man or a woman.
2. I think there is something wrong with a person who says that they are neither a man nor a woman.
3. I would be upset, if someone I'd known a long time revealed to me that they used to be another gender.
4. I avoid people on the street whose gender is unclear to me.
5. When I meet someone, it is important for me to be able to identify them as a man or a woman.
6. I believe that the male/female dichotomy is natural.
7. I am uncomfortable around people who don't conform to traditional gender roles, e.g., aggressive women or emotional men.
8. I believe that a person can never change their gender.
9. A person's genitalia define what gender they are, e.g., a penis defines a person as being a man, a vagina defines a person as being a woman.

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