

Sexual orientation and race mute the prescriptive nature of gender stereotypes

Sa-kiera T. J. Hudson¹ and Asma Ghani²

¹Department of Psychology, Yale University

²Department of Psychology, Harvard University

NOTE: This is an unpublished preprint currently under review. This preprint is a working paper shared to facilitate timely dissemination of science, and thus is subject to change.

Abstract

There is substantial research on the nature and impact of gender prescriptive stereotypes. However, there has been relatively little work on whether these stereotypes are equally applicable to men and women of different identities. Across two studies (total $N = 1074$), we assessed gender prescriptive stereotypes intersectionality in an American context, for men and women of different sexual orientations (Study 1) and races (Study 2). Results show strong evidence of a straight-centric bias, as prescriptive stereotypes of men and women most closely aligned with those of straight men and women, but limited evidence for a White-centric bias. Furthermore, observed gender differences in prescriptive stereotypes were smaller or non-existent for sexual and ethnic minority targets compared to straight and White targets, suggesting that theories around the dyadic nature of gender stereotypes between men and women might be restricted to straight and White men and women.

Keywords: gender, prescriptive stereotypes, intersectionality, race, sexual orientation

Sexual orientation and race mute the prescriptive nature of gender stereotypes

As far back as the 1940s (Bem, 1974; Eagly et al., 2020; Haines et al., 2016), social scientists have documented the persistent stereotypes of women as warm, kind, and emotional, and men as dominant, independent, and competitive. These gender stereotypes are simultaneously descriptive and prescriptive; they both describe the prevailing perceptions of what men and women actually do (i.e., descriptive) as well as the norms that govern what men and women *should* (i.e., prescriptive) and *should not* do (i.e., proscriptive; Prentice & Carranza, 2002). While both descriptive and prescriptive stereotypes influence a lack of women's representation in male-dominated fields (Burgess & Borgida, 1999; Heilman, 2001), prescriptive stereotypes in particular are a major source of backlash discrimination. In other words, not only are women perceived to be warm and not agentic, they *should be* warm and *shouldn't be* agentic – making an agentic woman undesirable and subjected to punitive measures (Diekmann & Goodfriend, 2006; Eagly & Karau, 2002).

Despite the abundant scholarship on the nature and consequences of gendered stereotypes, it is still unclear whether findings around gender prescriptive stereotypes are equally applicable to men and women from different social identities. Existing literature primarily investigates stereotypes of “men” or “women” without specifying social identities such as sexual orientation or race, tacitly¹ assuming generalizability to all sexual and ethnic minority subgroups within the broader gender category. Consequently, theories that aim to understand and mitigate the impact of gendered stereotypes (Diekmann & Goodfriend, 2006; Eagly et al., 2000; Koenig & Eagly, 2014; Ritter & Yoder, 2004) might be limited in their scope to prototypical groups - heterosexual White men and women.

¹ We say tacit because many studies don't acknowledge that the (lack of) diversity within their participant pool and study materials will limit the generalizability of their findings, and potentially to a large extent.

Incorporating an Intersectional Lens to Gender Prescriptive Stereotypes

By interrogating the underlying assumptions around race and sexual orientation in gender research, we ask a question grounded in intersectionality, or the acknowledgement and incorporation of the interconnected nature of social identities such as race, gender, sexual orientation, and class, into theories, hypotheses, methods, and interpretations (Cole, 2009; Collins, 2015; Crenshaw, 1982). Present in early sociological and critical feminist writings, it gained voice when coined by Kimberlé Crenshaw as a theory to understand how systems of oppression (e.g., sexism/patriarchy, racism/White supremacy) do not work independently but overlap to influence social inequality. In other words, we should not, and cannot, understand gender inequality without explicitly considering other systems of inequality.

As intersectionality work has become more common in psychology, there have been an increasing number of calls to action by scholars to address the dearth of research that examine more than one social group at a time (Cole, 2009; Davis, 2008; Else-Quest & Hyde, 2016; Warner & Shields, 2013). We answered this challenge with two important critiques – one methodological and one theoretical – to gendered stereotype research. Methodologically, we argue that ostensibly neutral labels such as “men” and “women” are not, in fact, neutral and are influenced by the prototypicality biases of participants. Thus, the work on gender stereotypes is likely research that primarily applies to heterosexual White, straight individuals. Theoretically, we critique the subsequent generalizability of gender prescriptive stereotypes and existing understanding of stereotype consequences, as our current theoretical understanding of gender stereotypes and subsequent backlash is incomplete at best and fundamentally misaligned at worst.

Below we outline evidence highlighting the prevalence of gender, sexual orientation, and racial prototypicality biases on cognition. More specifically, prototypicality biases such as

androcentrism (i.e., the assumption that an unspecified person is male), heterocentrism (i.e., the assumption that an unspecified individual is heterosexual), and Eurocentrism (i.e., the assumption that an unspecified person in America is White) often influence the representations generated when calling to mind a “person”, “woman”, or “man” (Alt et al., 2020; Bailey et al., 2019, 2020; Devos & Banaji, 2005; Ghavami & Peplau, 2013; Hamilton, 1991; Lick & Johnson, 2016). As an example, words that purportedly activate representations that are inclusive of both men and women (e.g., chairmen) implicitly activate only male concepts (Banaji & Hardin, 1996). Relatedly, people show a pro-straight bias in perception, assuming heterosexuality even when the base rates suggest otherwise (Lick & Johnson, 2016). Finally, perceptions of people as White permeate all levels of cognitive representations, including leadership (Gündemir et al., 2014; Rosette et al., 2008) and the color of God’s skin (Roberts et al., 2020).

These biases also influence *stereotypes* of groups. Work on descriptive stereotypes suggest that stereotypes of ethnic and sexual minorities do not always conform to the stereotypes of the majority group, leading to unique stereotypes for minorities (E. V. Hall et al., 2019). Using a free-response paradigm, Ghavami & Peplau (2012) showed that stereotypes of ethnic minorities exhibited androcentric biases, such that the stereotypes spontaneously generated for broad racial categories (e.g., Black people) most closely matched the stereotypes generated for men in that racial category (e.g., Black men) than the women (e.g., Black women). This pattern was mirrored for Eurocentric biases, as the stereotypes generated for the category of “men” and “women” most closely matched those generated for White men and women.

Descriptive stereotypes of lesbian women and gay men also do not conform to the stereotypes of their straight counterparts. In fact, the literature predominantly supports the idea of gender inversion, or the assumption that gay men and straight women are similar in traits while lesbian women and straight men are similar because the target of their sexual attraction is the

same (Blashill & Powlishta, 2009a, 2009b, 2012; Kite & Deaux, 1987; Lehavot & Lambert, 2007). Thus, gay men are seen as possessing feminine, while lesbian women are seen as possessing masculine, characteristics and preferences, suggesting that traditional gender descriptive stereotypes are limited to heterosexual men and women. In this paper, we extend past (descriptive) stereotype work by asking whether *prescriptive* stereotypes are also influenced by androcentric, heterocentric, and Eurocentric biases.

Finally, biases influence stereotypes and perceptions in an intersectional way, as certain sub-groups are more prototypical than others along multiple dimensions (E. V. Hall et al., 2019). For example, Black women do not activate the category “women” as strongly as White women nor the category “Black” as strongly as Black men (Carpinella et al., 2015; Goff et al., 2008; Johnson et al., 2012) in a categorization task. Follow-up research has corroborated the basic finding that Black is seen as masculine in society (Johnson et al., 2012; Thomas et al., 2014) and extended it to include Asian-Americans, who are presumed feminine, suggesting that gender can influence perceptions of race beyond androcentrism.

The Current Investigation

In view of prototypicality biases in cognition, it cannot be assumed that gendered prescriptive stereotypes are equally prescriptive for men and women of other sexual orientations and races beyond straight and White. Given prescriptive stereotypes’ role in engendering backlash, it is important to understand how people, and society at large, desire men and women of different social identities to behave (E. V. Hall, Phillips, et al., 2015). This paper adds to the discussion of gender dynamics by providing an unfiltered view of the landscape of gender prescriptive stereotypes for intersectional targets by sexual orientation (Study 1) and race (Study 2). If stereotypes for intersectional groups are unique from those of prototypical, majority groups, this suggests that theories that explain gender dynamics within the home and workplace

cannot be extrapolated to non-prototypical groups, and perhaps need to be modified to be inclusionary.

We had three major hypotheses regarding intersectional prescriptive gender stereotypes. First, we hypothesized that despite increases in women's representation in male-dominated spaces, gender prescriptive stereotypes still exist, an expectation that has been corroborated by recent work on gender descriptive stereotypes (Haines et al., 2016). Thus, we expected people to believe a "woman" should display feminine and not masculine traits while a "man" should hold masculine and not feminine traits.

However, these gendered stereotypes are not rooted in beliefs about women and men as a whole, but on prototypical ones. Thus, our second hypothesis was that prototypicality biases, or more specifically, androcentrism, heterocentrism, and Eurocentrism, influence prescriptive stereotypes. We expected stereotypes of targets labeled as a "person" to be more similar to stereotypes of targets labeled "man" compared to "woman" (i.e., androcentrism). We also expected stereotypes of unlabeled targets to be more similar to stereotypes of targets labeled as "straight" than "gay" (i.e., heterocentrism; Study 1), as well as "White" than any other race (i.e., Eurocentrism; Study 2).

Our third hypothesis was that sexual orientation and race would substantively alter the prescriptive nature of stereotypes for men and women. Since, to our knowledge, there is no existing work on intersectional *prescriptive* stereotypes, we assumed prescriptive stereotypes will overlap with descriptive ones (Prentice & Carranza, 2002). At the intersection of sexual orientation and gender (Study 1), we expected gender inversion to drive stereotype expectations such that gender differences between gay men and lesbian women would be the inverse of gender differences between straight men and women. In other words, prescriptive stereotypes of gay men will be more similar to straight women's than straight men's while prescriptive

stereotypes of lesbian women will be more similar to straight men's than straight women's. At the intersection of race and gender, we expected Black men and women to face amplified prescriptions of masculinity and Asian men and women to face amplified prescriptions for femininity, based on the gendered race theory. To add to the literature on racial stereotypes more broadly, we investigated most of the largest racial groups in America including White, Black, Asian, Latino, and Middle-Eastern in the realm of prescriptive stereotypes; however, the research on stereotypes of racial groups beyond Black and Asian is scant (Ghavami & Peplau, 2013). It is currently unclear whether Latino or Middle Eastern people are seen through a similar masculine-feminine lens; a question we explore here.

All data and data analysis scripts can be found on OSF (https://osf.io/nu8v2/?view_only=968a9afc3e4f42e4a01b2b39090aa2fb), as well as descriptive statistics and supplementary analyses. We report all manipulations, measures, and exclusions in these studies.

Studies 1 and 2: Prescriptive intersectional stereotypes by gender and sexual orientation and gender and race

Method

Participants

We used a rule of thumb strategy to recruit roughly 100 participants per condition and with such a sample we had 80% power to detect a paired sample *t*-test as small as $d = 0.28$. We recruited participants from two convenience participant pools: the Harvard Digital Lab for the Social Sciences (DLABSS) in Study 1 and Amazon Mechanical Turk in Study 2. DLABSS participants are volunteers and thus were not paid (see www.dlabss.harvard.edu). We paid our Amazon Mechanical Turk participants \$1.20 for their time. Of the 560 recruited participants in Study 1, 458 finished, while 619 out of 694 participants finished Study 2. We didn't exclude

participants from either study for any reason other than not finishing the study. Participants in Study 1 predominantly self-identified as White (79%) and heterosexual (83%), with gender identity roughly evenly split between woman (57%) and man. Participants in Study 2 had a similar demographic profile, with 69% self-identified as White and evenly split between identifying as a man (46%) or woman (53%)².

Materials and Procedure

We asked participants to indicate the desirability of targets of different sexual orientations in Study 1 and different races in Study 2, having a series of 70 traits such as “Assertive”, “Warm and Kind”, and “Honest” (see supplementary materials for the full list of traits). These traits were amalgamated from several sources to encompass traits that are traditionally considered masculine, feminine, and neutral (Bem, 1974; E. V. Hall, Phillips, et al., 2015; Prentice & Carranza, 2002), as well as traits that are often used to describe sexual (e.g., “Theatrical”) or ethnic minoritized groups (e.g., “Musical”). Participants first familiarized themselves with the traits before moving to the trait rating task.

All participants rated trait desirability for a man, woman, and person; the sexual orientation or race of the targets differed between subjects. In Study 1 we randomly assigned participants to rate trait desirability for straight targets (i.e., a straight man, straight woman, and straight person), gay targets (i.e., a gay man, lesbian woman, and homosexual person), or label-less targets (i.e., a man, a woman, and person). In Study 2 we randomly assigned them to rate trait desirability for a man, a woman, and a person that was White, Black, Asian, Latino, Middle-Eastern, or label-less. The label-less conditions represent the standard way of assessing gender prescriptive stereotypes (thus referred to as the Control conditions below) and constitute replications of Prentice & Carranza (2002) with a slightly altered list of traits.

² Due to a coding error, we did not collect sexual orientation information in Study 2.

Participants rated the traits on a 9-point scale from 1 (Extremely Undesirable) to 9 (Extremely Desirable) while answering “How desirable is it in American society for a [TARGET] to possess each of the following characteristics?” We purposefully asked participants to indicate how they thought the average American would respond to lower demand characteristics (Fiske et al., 2002). The targets were presented sequentially, with participants randomly assigned to rate the man or the woman target on all 70 traits first, while the person target was always rated last. After the three rating tasks, participants described what they thought a typical man or woman of different sexual orientations (Study 1) and races (Study 2) looked and acted like in a free-response task. Finally, participants filled out a series of exploratory questionnaires, including a sexual and racial prototypicality scale and the Internal and External Motivation to appear Non-Prejudiced scale (IMS-EMS; Plant & Devine, 1998) towards LGBTQ people in Study 1 or ethnic minorities in Study 2. We do not discuss the open-ended responses nor the exploratory questionnaires in this paper.

Data Analysis Strategy

We analyzed the data in Study 1 using a multilevel model in which Target Gender (i.e., man, woman, person), Target Sexual Orientation (i.e., straight, gay, control), and Traits (i.e., Aggressive, Ambitious, Approval Seeking, etc.) interacted to predict desirability ratings and included a participant-level random intercept to account for the within-subject nature of the trait ratings. We also accounted for the effect of participant gender (Prentice & Carranza, 2002) by including the two-way interactions between participant gender (effects coded) and each of our variables of interest. We analyzed the data in Study 2 similarly as in Study 1 but instead of Target Sexual Orientation, we interacted Target Race (i.e., White, Black, Asian, Latino, Middle-Eastern, Control) with Target Gender and Traits. We effects-coded each of our variables with the Control condition, the Person target, and the trait “Yielding” as reference categories.

For both studies, at each stage the more complicated models better fit the data (the marginal R^2 in Study 1 was .50 and .33 in Study 2). To account for Type 1 error, we used the *emmeans* package in *R* (Lenth, 2021), controlling for multiple comparisons for all contrasts using the more stringent Bonferroni method. For large samples and complicated models, *emmeans* uses z statistics for hypothesis testing instead of t -statistics, as it is much easier to calculate computationally. In this instance, using a z -test is the equivalent of using a t -test with infinite degrees of freedom.

Results

Hypothesis 1: Gender Stereotypes Still Exist

We answered this question by examining gender differences in trait desirability between the man and woman targets in the Control conditions in Studies 1 and 2. As expected, women and men were held to different standards on a variety of traits. There were 55 traits (out of 70; 79%) in Study 1 and 48 traits (69% of traits) in Study 2 for which participants' desirability for a man versus a woman to display those traits significantly differed. The differences between men and women were robust, with some trait differences (e.g., feminine and masculine) as large as six units on a nine-point scale. To place the continuity of gendered prescriptions in context, there were 60 traits that both we and Prentice and Carranza (2002) studied³. Of those 60, Prentice & Carranza found significant gender differences for 55 of them. We found significant differences for 47 of the 60 in Study 1 and 41 in Study 2 (**Error! Reference source not found.** contains the gender prescriptive and proscriptive stereotypes that were present in Prentice and Carranza Study 1, our Study 1 and Study 2).

Hypothesis 2: Prototypicality biases impact people's prescriptive stereotypes

³ We further categorized stereotypes in both studies according to the intensified and relaxed prescriptive and proscriptive framework as outlined in Prentice and Carranza (2002). Those analyses can be found in the supplementary materials.

We examined whether people's prescriptive stereotypes were influenced by androcentrism in Studies 1 and 2, empirically defined to mean that trait desirabilities would be equal or more similar between the person and the man targets compared to the person and the woman targets. As Target Gender was within-subjects, we were able to run difference score analyses to investigate whether desirability differences between person and man targets were relatively smaller than gaps between person and woman targets. We used the absolute value of the differences in these analyses. In Study 1, we also assessed evidence of heterocentrism, meaning the desirabilities of traits for the label-less targets of men, women, and people would be more similar to straight men, women, and people than gay men, lesbian women, and homosexual people. Finally in Study 2, we examined Eurocentrism, defined to mean the trait desirabilities for the label-less man, woman, and person targets would be most similar to White man, woman, and White person targets compared to any of the other races.

Androcentrism. Overall, the data supported an androcentric bias in gender prescriptive stereotypes. In Study 1, there was a significant main effect of Target Gender, $F(2, 62385.31) = 60.72, p < .001$, as well as an interaction between Target Gender and Sexual Orientation, $F(4, 62380.66) = 3.99, p = .003$. Pairwise comparisons between the man, woman, and person targets collapsing across all traits and sexual orientations showed that there was not a significant difference between the man and the person targets, $z = -1.69, p = .271, d = -0.02$, but there was between the woman and the person target, $z = 7.73, p < .001, d = 0.08$.

Androcentrism was also present *within* sexual orientations (Figure 1). The average trait desirability for the person and the man target in the Control condition was not significantly different from one another, $z = -0.55, p = .999, d = -0.01$, while there was a significant difference between the person and the woman target, $z = 6.00, p < .001, d = 0.09$, and the gap between person and man was significantly smaller than person and woman, $z = -20.20, p < .001$,

$d = -0.31$. This pattern was mirrored in the Straight condition such that the average trait desirability for the straight person target was not significantly different from the straight man target, $z = 1.44, p = .449, d = 0.03$, and was significantly smaller, $z = -15.7, p < .001, d = -0.28$, than the difference between straight person and straight woman target, $z = 4.84, p < .001, d = 0.08$.

Conversely, there was weak evidence of androcentrism for the gay targets, as the desirability ratings for both the gay man target ($z = -3.70, p < .001, d = -0.07$) and the lesbian woman target ($z = 3.15, p = .005, d = 0.06$) were significantly different from the homosexual person target. However, when we assessed whether the gay man target was *relatively* more similar to the homosexual person than was the lesbian woman target using difference scores, we do find that to be supported, $z = -5.70, p < .001, d = -0.11$.

Moving to Study 2, while there was also a significant main effect of Target Gender, $F(2, 127731.99) = 21.77, p < .001$, as well as an interaction between Target Gender and Target Race, $F(10, 127731.75) = 8.26, p < .001$, there was mixed evidence of androcentrism. Pairwise comparisons between the men, the women, and the person targets across all traits and races showed weak evidence of androcentrism on trait desirability, as the person target was significantly different from the man target, $z = 5.40, p < .001, d = 0.04$, as well as the woman target, $z = 5.98, p < .001, d = 0.04$. However, the man target was relatively more similar to the person target compared to the woman target, $z = -18.50, p < .001, d = -0.13$. There was also weak evidence of androcentrism in the Control condition (Figure 2) such that the average trait desirability for the person and the male target, $z = 3.13, p = .005, d = 0.05$, was significantly smaller, $z = -9.28, p < .001, d = -0.15$, than the difference between the person and the woman target, $z = 4.82, p < .001, d = 0.08$.

However, there was evidence of androcentrism for White, Middle-Eastern, and Black targets. The average trait desirability for the White person target was not significantly different from the White man target, $z = 1.36, p = .523, d = 0.02$, but was significantly different from the White woman target, $z = 5.91, p < .001, d = 0.10$, and was relatively more different as well, $z = -17.40, p < .001, d = -0.29$. Similarly, the average trait desirability for the Middle-Eastern person target was not significantly different from the Middle-Eastern man target, $z = 2.05, p = 0.121, d = 0.03$, but was significantly different from the Middle-Eastern woman target, $z = 5.07, p < .001, d = 0.08$, and was relatively different, $z = -10.8, p < .001, d = -0.18$. For Black targets, the average trait desirability for the Black person target was not significantly different from the Black man target, $z = 1.31, p = .569, d = 0.02$, but was significantly different from the Black woman target, $z = -3.39, p = .002, d = -0.06$. However, there was no difference between the two gaps, $z = 0.49, p = .999, d = -0.01$.

For Latino targets, there was partial evidence for a *female*-centric bias, or gynocentrism, instead of androcentrism. The average trait desirability for the Latino person target was not significant different from the Latina *woman* target, $z = 1.15, p = .754, d = 0.02$, but was significantly different from the Latino man target, $z = 3.22, p = .004, d = 0.06$. The relative difference between Latina women and Latino men from Latino people was not significant however, $z = 0.606, p = .999, d = 0.01$.

Finally, for Asian targets, it wasn't clear whether overall trait desirabilities conformed to androcentrism or gynocentrism. While the average trait desirability for the Asian person target was not significantly different from the Asian woman target, $z = 1.17, p = .722, d = 0.02$, but was (marginally) significantly different from the Asian man target, $z = 2.15, p = .095, d = 0.04$, difference score analyses showed that the desirability gap between Asian Person and Asian Man was smaller than the gap between Asian person and Asian woman, $z = -9.03, p < .001, d = -0.15$.

Heterocentrism. There was a significant main effect of Target Sexual Orientation, $F(2, 283.63) = 18.48, p < .001$ as well as a significant interaction between Target Gender and Target Sexual Orientation, reported above. The aggregated trait desirabilities across all sexual orientations between the Control and Straight condition were statistically indistinguishable, $z = -0.70, p = .999, d = -0.03$, while there was a significant difference between the Control and Gay/Lesbian condition, $z = 5.01, p < .001, d = 0.19$.

Furthermore, this difference was present within every Target Gender (Figure 3). The trait desirability for a person compared to a homosexual person was significantly different from one another, $z = 5.48, p < .001, d = 0.22$, while it was statistically indistinguishable between a person and a straight person, $z = -0.85, p = .999, d = -0.03$, and the person-straight person comparison was relatively smaller than the person-homosexual person comparison as well, $z = -5.94, p < .001, d = -0.25$. The aggregate trait desirability for a man compared to a gay man was also significantly different from one another, $z = 4.01, p < .001, d = 0.16$, while it was statistically the same between a man and a straight man, $z = -0.01, p = .999, d = 0.00$, and the man-straight man comparison was relatively smaller than the man-gay man comparison as well, $z = -3.75, p < .001, d = -0.16$. Lastly, the aggregate trait desirability differed for a woman compared to a lesbian woman, $z = 4.61, p < .001, d = 0.18$, but didn't for a woman compared to a straight woman, $z = -1.15, p = .756, d = -0.05$, and the woman-straight woman comparison was relatively smaller than the woman-lesbian woman comparison as well, $z = -5.40, p < .001, d = -0.23$.

Eurocentrism. There was a significant main effect of Target Race, $F(5,606) = 13.79, p < .001$, as well as a significant interaction between Target Gender and Target Race shown above. However, pairwise comparisons between Target Race across all traits and sexes didn't show evidence of Eurocentrism on trait desirability, as the Control condition was significantly different from the White condition, $z = -3.82, p = .002, d = -0.20$. In terms of the other contrasts,

there was not a significant difference between trait desirabilities in the control condition and the Latino, $z = 0.52, p = .999, d = 0.03$, Asian, $z = 1.29, p = .999, d = 0.07$, and Black conditions, $z = 2.8, p = .076, d = 0.14$, while the difference between Control and Middle-Eastern was significant, $z = 3.87, p = .002, d = 0.20$.

Furthermore, there wasn't evidence of Eurocentrism on the Target Gender level either. "Person" was significantly different from "White Person", $z = -0.37, p = .004, d = -0.19$, "Man" was significantly different from "White Man", $z = -4.18, p = .004, d = -0.22$, and "Woman" was significantly different from "White Woman", $z = -3.24, p = .018, d = -0.17$ (see supplementary materials for other comparisons). Although there isn't strong evidence for Eurocentrism in stereotypes in isolation, as we discuss in the next section, gendered stereotypes as a dynamic between men and women showed evidence of Eurocentrism.

Hypothesis 3: Sexual orientation and race altered the prescriptive stereotypes of men and women.

As expected, the three-way interactions were significant in Study 1, $F(276, 62299.72) = 17.69, p < .001$, and Study 2, $F(690, 127728.01) = 3.18, p < .001$. We hypothesized that in Study 1 the prescriptive stereotypes of gay men will be similar to straight women while the prescriptive stereotypes of lesbian women would be similar to straight men, in line with gender inversion theory. In Study 2, we hypothesized prescriptive stereotypes would conform to expectations set by the gendered race theory, such that gender prescriptive stereotypes for Black men and women would be masculinized while stereotypes for Asian men and women would be feminized. We also explored whether we would find similar patterns for Latino and Middle Eastern men and women. All descriptive statistics and pairwise comparisons for each trait by Target Gender and

Target Sexual Orientation/Race can be found in the supplementary materials, as well as each trait plotted separately.

Sexual Orientation. There were 15 out of 70 traits for which there was gender inversion (Figure 4), meaning there were significant gender differences between straight men and straight women as well as between gay men and lesbian women. Furthermore, the direction of the gender difference was flipped from one sexual orientation to another, e.g., if it was more desirable for a straight man to be aggressive compared to a straight woman, it was *less* desirable for a gay man to be aggressive compared to a lesbian woman. A subset of these traits (i.e., Attention to appearances, Cheerful, Excitable, Expresses emotion, Friendly, Stubborn, Theatrical, Warm and kind) showed a unique type of gender inversion in which the desirability ratings for either the man or the woman target was the same for all sexual orientations but diverged for the opposite gender. What made this pattern of gender inversion noteworthy was that the normative pressure differed by sexual orientation for only one gender. For example, the desirability of paying attention to appearances showed gender inversion such that straight women and gay men faced a stronger prescription to pay attention to their appearances compared to straight men and lesbian women, respectively. However, the desirability of paying attention to appearances was the same for men of all sexual orientations but diverged for women, with people stating a lowered desirability for lesbian women to pay attention to their appearances compared to straight women. Excitable, Expresses emotion, and Theatrical were the three traits for which there was differential pressure on men of different sexual orientations compared to the women.

Gender inversion did not describe the pattern of prescription and proscription for the bulk of the traits, however. Instead, for 41 traits we found a pattern (“Sexual Orientation Asymmetry”), such that there were differences in the prescriptions between a man and a woman, but only for one of the sexual orientations. For all but four traits (i.e., flirtatious, materialistic,

musical, and well-dressed), there were significant gender differences between the straight targets but not for the gay targets. In other words, people had distinct gendered expectations for how straight men and straight women should act but did not have as distinct expectations on how gay men and lesbian women should act. This conclusion is supported by the fact that there were 52 traits for which trait desirability for a straight man differed from a straight woman but only 19 traits for which trait desirability differed between a gay man and lesbian woman.

The last 14 traits did not show any gender differentiation in either straight or gay targets. Of these traits, 13 of them were traits that showed a main effect of Target Sexual Orientation. More specifically, trait desirability was higher for straight targets than gay targets for 10 traits (i.e., Clean, Conservative, Consistent, Dependable, Disciplined, Enthusiastic, Honest, Likeable, Loyal, and Protects Others) while trait desirability was higher for gay targets than straight targets for three traits (Moody, Nosy, and Superstitious).

Race. We tested our hypotheses around the gendered race theory by first examining racial differences in the desirability to be masculine and feminine. Previous research has found that Black is descriptively associated with masculinity and Asian is associated with femininity (Galinsky et al., 2013). Here we examined prescriptive associations. First looking at masculinity (Figure 5), the gendered race theory predicts that Black men would be the most desired to be masculine, followed by White men, and then Asian men. Contrary to hypotheses, it was most desirable for a White man ($M = 7.94$) to be masculine compared to Black ($M = 6.76$), Asian ($M = 6.14$), Latino ($M = 6.94$), and Middle-Eastern ($M = 6.67$) men. All ethnic minority men in contrast were held to the same standards around masculinity as each other, $ps > .888$. In contrast, there were no differences in the desirability of White ($M = 3.06$), Black ($M = 3.14$), Asian ($M = 3.11$), Latino ($M = 3.28$), or Middle-Eastern ($M = 3.18$) women to be masculine, $ps > .999$. This result is also contrary to the gendered race theory, which would have presumed that Black

women, in particular, would be desired to be more masculine compared to White and Asian women.

Next, we looked at the desirability to be feminine. Here there was some support for the gendered race theory, as it was more desirable for an Asian man ($M = 3.97$) to be feminine compared to a White man ($M = 2.84$), who didn't differ from Black ($M = 2.96$), Latino ($M = 3.39$), or Middle-Eastern ($M = 3.00$) men. It was also less desirable for a Black ($M = 6.67$) and a Middle-Eastern ($M = 6.68$) woman to be feminine compared to a White woman ($M = 7.86$), who didn't differ from Asian ($M = 7.23$) or Latina ($M = 7.11$) women.

To continue to investigate the gendered race theory, we assessed, on a trait by trait basis, whether people's prescriptive stereotypes for label-less men and women were similar or different than the stereotypes of men and women of different races. To do this, we tabulated whether the 99% CI for each trait desirability for White, Asian, Black, Latino men and women included the desirability point estimate for a generic man and woman (i.e., the point estimates from the Control condition in Study 2). First examining the male targets, overall, White men were hypermasculinized compared to men of other races, $\chi^2(4, N = 70) = 24.20, p < .001$, as there were significantly more traits for which the White man's CI included the label-less man point estimate compared to Black men, Asian Men, Latino men, and Middle-Eastern men. In contrast, there was no difference between men of different races in the degree of overlap for the label-less woman point estimates, $\chi^2(4, N = 70) = 2.54, p = .638$. Regarding women, overall Asian women were hyperfeminized and Black women were hypofeminized compared to White, Latina, and Middle-Eastern women, $\chi^2(4, N = 70) = 21.48, p < .001$, supporting the gendered race theory, while there was no difference between women of different races in the degree of overlap for label-less man point estimates, $\chi^2(4, N = 70) = 5.85, p = .211$.

Beyond gendered race theory, as was the case for sexual orientation, there was more pronounced gender differentiation in stereotypes for the prototypic group than non-prototypic groups (“Race Asymmetry”). More specifically, close to half of the traits (34) showed significant gender differences between a White man and a White woman (i.e., Aggressive, Ambitious, Approval seeking, Arrogant, Assertive, Athletic, Business sense, Career Oriented, Compassionate, Competitive, Controlling, Decisive-able to make decisions, Defends own beliefs, Emotional, Expresses emotion, Feminine, Forceful, Gullible, High self-esteem, Leadership-ability, Loves children, Masculine, Naïve, Protects others, Rebellious, Self-reliant, Sensitive, Shy, Strong personality, Stubborn, Warm and kind, Weak, Willing to take risks, and Yielding) while in contrast, none of the other racial groups had more than a fourth of the traits show the same level of gender differentiation. There were 16 traits for which this was true for Middle-Eastern targets (i.e., Aggressive, Ambitious, Assertive, Business sense, Career Oriented, Competitive, Controlling, Decisive-able to make decisions, Feminine, Forceful, Leadership-ability, Masculine, Naïve, Sensitive, Shy, and Strong personality), 12 traits for Asian targets (Aggressive, Business sense, Career Oriented, Child-like, Competitive, Expresses emotion, Feminine, Leadership-ability, Masculine, Naïve, Sensitive, and Shy), four traits for Latino targets (Athletic, Feminine, Masculine, and Sensitive), and only three traits for Black targets (Athletic, Feminine, and Masculine).

Finally, of the 36 traits that didn’t show gender differences in White targets, 25 of them showed a main effect of Race for Black targets, 25 for Middle-Eastern targets, 22 for Latino targets, and 15 for Asian targets. For almost all of these stereotypes where there was a main effect of Race, there was a greater desire for White targets to display them than ethnic minorities.

General Discussion

For decades researchers have studied the sticky nature of gender prescriptive stereotypes. However, this research has predominantly been done in isolation to other identities that likely impact the prescriptions men and women are under. In this work we explored the nature of gender prescriptive stereotypes by asking people to rate the desirability of a man, woman, and person of various sexual orientations in Study 1, and races in Study 2, to display a series of traits. Overall, we find support for most of our hypotheses. As expected, gender stereotypes are still pervasive forces in society. Across 70 traits, close to 70% of them showed robust gender differences. Furthermore, we found support for the presence of two out of three prototypicality biases. There was robust evidence of heterocentrism, as people's expectations for men and women conformed to the expectations of straight men and women rather than gay men and women. Prescriptive stereotypes showed fairly consistent evidence of androcentrism, as people's trait desirabilities for the person target for the Control and Straight conditions in Study 1, and in the Black, White, and Middle-Eastern conditions in Study 2, were closer to the man target in the same condition than to the woman target.

However, prescriptive stereotypes did not support Eurocentrism, as the patterns seen in the label-less condition did not conform more to White targets than other races. The lack of Eurocentrism could be due to the way we solicited stereotypes. Previous demonstrations of Eurocentrism have used free-recall and implicit paradigms (Devos & Banaji, 2005; Ghavami & Peplau, 2013; Gündemir et al., 2014; Rosette et al., 2008); thus, Eurocentrism might be easier to detect in less explicit measures. While there wasn't strong evidence of Eurocentrism in individual target stereotypes, there was Eurocentrism in the normative pressures applied to men and women as a unit. The stereotypes of how men and women should behave in relation to one another best matched people's stereotypes of White men and women compared to any other race.

Finally, there was some support for the gender inversion theory in Study 1 and gendered race theory in Study 2. In Study 1, of the 52 traits that showed gender differences between straight men and straight women, only 15 of them also showed an inverted pattern of gendered differences between gay men and lesbian women. In Study 2, contrary to our expectation that Black men and women would be relatively more masculinized, White men were hypermasculinized. Asian men and women, as expected, were relatively more feminized, with Latino and Middle-Eastern seen similarly to White men and women in terms of femininity and masculinity. However, across both studies and for the bulk of the traits, participants did not draw large distinctions between the prescriptions of non-prototypical men and women. Indeed, participants reported significant differences between Black men and women only for three out of 70 traits.

In sum, from a methodological standpoint, label-less control targets were not seen as neutral targets in people's minds but were imbued with social identities. Thus, research that does not specify social identities likely only applies to prototypical groups (in this case, straight, White individuals, in line with our methodological critique) and it should not be assumed that such work is generalizable, supporting our theoretical critique.

Implications

These findings have several implications for the work on gender stereotypes specifically and gender research more broadly. We highlight two. The first is that our current understanding of gender prescriptive stereotypes is not applicable to non-prototypical groups. Across both sexual orientation and race, being part of a non-prototypical group had more influence on people's prescriptions than being a particular gender; people didn't desire gay, Black, Asian, Latino, and Middle-Eastern men and women to act as differently from one another as they desired straight and White men and women to act. Unpublished research on representations of

transgender men and women have found a similar lack of gender differentiation within non-prototypical targets (Gallagher & Bodenhausen, 2021), a phenomenon they label as “de-gendering”. Other work has also found that global stereotypes around competence and warmth for Black men and women show more similarity than the same stereotypes between White men and women (Coles & Pasek, 2020), further supporting the conclusion that gender differentiation is muted within non-prototypical groups.

Interestingly, within non-prototypical groups, we found that people differentiated Middle-eastern men from Middle-Eastern women the most. We can only speculate, but it could be due to beliefs that Middle-Eastern people are particularly religious and conservative (Ghavami & Peplau, 2013) and thus maintain traditional gender roles. It could also be due to weak group stereotypes and thus participants defaulted to prototypical gender stereotypes. Finally, there could be an effect of status, as perceptions of race and status are related (Dupree et al., 2021; Penner & Saperstein, 2008). For example, Middle-Eastern and Asian Americans are stereotyped as rich while Black and Latino Americans are stereotyped as poor (Ghavami & Peplau, 2013); we found the greatest gender differences in the targets that are stereotyped as wealthier. More research is needed on non-prototypical groups more broadly to understand when individuals default to stereotypes about one identity over another (Petsko & Bodenhausen, 2020).

Second, while there is often concordance between descriptive and prescriptive stereotypes (Prentice & Carranza, 2002) for men and women, that concordance becomes untethered in non-prototypical groups. In other words, for straight and White individuals, descriptive stereotypes match prescriptive stereotypes. How people expect straight men and women to be matches how straight men and women *ought to be* as well. However, there is a mismatch for non-prototypical targets. One glaring example is the masculinity associated with White and Black men. Descriptively Black men are seen as more masculine than White men (E.

V. Hall, Galinsky, et al., 2015; Johnson et al., 2012). If the descriptive stereotypes associated with Black men, in terms of masculinity, matched prescriptive stereotypes, we would expect participants to also indicate that it is most desirable for Black men (out of other races) to be masculine. Instead, we found that people desired Black men to be less masculine than White men.

This finding suggests that if a Black man displays the same level of masculinity as a White man, he is already too masculine and thus will face backlash. Given the large amount of research on discrimination faced by Black men because of stereotypes around dangerousness and threat (Ghavami & Peplau, 2013; Livingston & Pearce, 2009; Pager et al., 2009), comparing descriptive and prescriptive expectations of Black men gives us another account of how these disparities can arise. Indeed, the discrepancy between descriptive and prescriptive stereotypes also can explain why Black men who act communally or appear nonthreatening are rewarded (Livingston et al., 2012; Livingston & Pearce, 2009).

Prescriptive stereotypes associated with lesbian women also show this discrepancy between descriptive and prescriptive stereotypes. Work on descriptive stereotypes broadly show that people assume lesbian women are like straight men across a multitude of traits and characteristics. Prescriptively, however, there seems to be a distinct split in the masculine traits that lesbian women are desired to embody more so than gay men or straight women compared to the ones where they are not. For example, although it is more desirable for lesbians to be aggressive, assertive, and forceful compared to gay men or straight women, there are no differences in the desirability for traits like possessing business sense, being career oriented, or having leadership abilities. This suggests that although it might be acceptable for lesbian women to possess more masculine traits from a personality perspective, it isn't as acceptable for them to possess masculine traits in ways that would disturb the gender status quo. This split in masculine

traits is mirrored in work on descriptive stereotypes of women of different races. Black women, who are also seen as more masculine are seen as agentic from a dominance perspective but not from a competence perspective (Rosette et al., 2016).

Limitations and Future Directions

There are some limitations to the research presented here, the most obvious being the lack of diversity within our samples, especially along sexual orientation and race. Thus, these findings represent the prescriptive beliefs of prototypical group members. Given that we asked participants to indicate the beliefs of an average American, the same prototypicality biases studied here likely influenced participants' answers, making it even more probable that these findings represent the beliefs of White and straight America. Future studies should investigate the normative pressures non-prototypical groups place on themselves rather than their expectations of what the broader society desires for their behavior.

Another limitation is our simplified understanding of gender and sexual orientation. We assumed a gender binary in our design, asking individuals about their stereotypes for men and women. This design cannot further our understanding of gender fluid, gender queer, or non-binary individuals; future studies should examine prescriptive stereotypes for individuals along the gender spectrum. Similarly, we only assessed stereotypes for gay men and lesbian women without acknowledging the diversity within those categories as well as other sexual minorities like bisexual or transgender men and women. Participants likely assumed a more feminine gay man and a more masculine lesbian woman, but we do not have evidence to speak to this. There is a need for intersectional work looking at subtypes within social categories (for some examples, see Brambilla et al., 2011; Clausell & Fiske, 2005).

Finally, we assessed stereotypes of people of different races without specifying other social identities that likely are assumed. For example, being a Muslim is often associated with

individuals identifying as Middle Eastern, thus stereotypes towards Middle Eastern Americans likely reflect beliefs about Muslim Americans as well. As another example, we asked about Asian Americans although the prototype for Asian Americans is East Asians rather than South Asians (Kibria, 1998; Kuo et al., 2020), at least in the American context these studies were conducted (Goh & McCue, 2021). Finally, there have been a recent surge of stereotype and perception research at the intersection of race and sexual orientation (Johnson & Ghavami, 2011; Pedulla, 2014; Petsko & Bodenhausen, 2019; Preddie & Biernat, 2021), suggesting that these categories also influence one another in ways we do not examine here. We still believe there is utility in our studies, as these studies are but the first of, hopefully, many that will examine prescriptive stereotypes intersectionally.

Finally, our determinations of gendered patterns relied on statistical breaks. We attempted to strike a balance between statistical rigor and letting a focus on *p*-values overshadow the exploratory nature of the work. However, we let the data tell us where the important cleavages in patterns of gendered stereotypes lie, and there were some ambiguous cases. For example, while the desirability for straight and gay targets to be clean reflects a main effect of sexual orientation and not an interaction, the pattern clearly reflects a more gender asymmetry effect. It was more desirable for a straight woman to be clean than a lesbian woman but equally as desirable for a straight and gay man to be clean. While this is indeed a gender asymmetry pattern, the fact that there weren't gender differences within both straight and gay targets precludes it from the category. Thus, we see gender stereotypes as more amorphous than we present.

Despite these limitations, the results of these two studies invite inquiry into many avenues of research. We highlight two here. The first is to interrogate current work on gender backlash effects. The findings from lesbian and ethnic minority women suggest that the ways in

which they will experience role violations is distinct from straight and White women. While there have been some recent research showing that Black women don't always experience backlash when acting in agentic ways (Livingston et al., 2012) compared to women in general (Brescoll & Uhlmann, 2008), much of the work blurs over these distinctions.

Second, these findings also highlight the importance of studying intra-racial and intra-sexual gender dynamics, as the very nature of gender prescriptive stereotypes seem predicated upon the social identities at play. What does it mean for our theories that there is a smaller distinction between the prescriptive stereotypes of gay, Black, Asian Latino, and Middle Eastern men and women compared to straight and White men and women? How should we understand perceptions of, and engagement in, gender dynamics intra-sexually and intra-racially? Future research should explore these questions.

References

- Alt, N. P., Lick, D. J., & Johnson, K. L. (2020). The straight categorization bias: A motivated and altruistic reasoning account. *Journal of Personality and Social Psychology, 119*(6), 1266–1289. <https://doi.org/10.1037/pspi0000232>
- Bailey, A. H., LaFrance, M., & Dovidio, J. F. (2019). Is Man the Measure of All Things? A Social Cognitive Account of Androcentrism. *Personality and Social Psychology Review, 23*(4), 307–331. <https://doi.org/10.1177/1088868318782848>
- Bailey, A. H., LaFrance, M., & Dovidio, J. F. (2020). Implicit androcentrism: Men are human, women are gendered. *Journal of Experimental Social Psychology, 89*(October 2019), 103980. <https://doi.org/10.1016/j.jesp.2020.103980>
- Banaji, M. R., & Hardin, C. D. (1996). Automatic stereotyping. *Psychological Science, 7*(3), 136–141. <https://doi.org/10.1111/j.1467-9280.1996.tb00346.x>
- Bem, S. (1974). The Measurement of Psychological Androgyny. *Journal of Consulting and Clinical Psychology, 42*(2), 155–162. <https://doi.org/https://doi.org/10.1037/h0036215>
- Blashill, A. J., & Powlishta, K. K. (2009a). Gay stereotypes: The use of sexual orientation as a cue for gender-related attributes. *Sex Roles, 61*(11–12), 783–793. <https://doi.org/10.1007/s11199-009-9684-7>
- Blashill, A. J., & Powlishta, K. K. (2009b). The impact of sexual orientation and gender role on evaluations of men. *Psychology of Men & Masculinity, 10*(2), 160–173. <https://doi.org/10.1037/a0014583>
- Blashill, A. J., & Powlishta, K. K. (2012). Effects of Gender-Related Domain Violations and Sexual Orientation on Perceptions of Male and Female Targets: An Analogue Study. *Archives of Sexual Behavior, 41*(5), 1293–1302. <https://doi.org/10.1007/s10508-012-9971-1>
- Brambilla, M., Carnaghi, A., & Ravenna, M. (2011). Status and Cooperation Shape Lesbian

Stereotypes. *Social Psychology*, 42(2), 101–110. <https://doi.org/10.1027/1864-9335/a000054>

Brescoll, V. L., & Uhlmann, E. L. (2008). Can an angry woman get ahead? Status conferral, gender, and expression of emotion in the workplace: Research article. *Psychological Science*, 19(3), 268–275. <https://doi.org/10.1111/j.1467-9280.2008.02079.x>

Burgess, D., & Borgida, E. (1999). Who women are, who women should be: Descriptive and Prescriptive Gender Stereotyping in Sex Discrimination. *Psychology, Public Policy, and Law*. <https://doi.org/10.1037/1076-8971.5.3.665>

Carpinella, C. M., Chen, J. M., Hamilton, D. L., & Johnson, K. L. (2015). Gendered Facial Cues Influence Race Categorizations. *Personality and Social Psychology Bulletin*, 41(3). <https://doi.org/10.1177/0146167214567153>

Clausell, E., & Fiske, S. T. (2005). When do subgroup parts add up to the stereotypic whole? Mixed stereotype content for gay male subgroups explains overall ratings. *Social Cognition*, 23(2), 161–181. <https://doi.org/10.1521/soco.23.2.161.65626>

Cole, E. R. (2009). Intersectionality and research in psychology. *The American Psychologist*, 64(3), 170–180. <https://doi.org/10.1037/a0014564>

Coles, S. M., & Pasek, J. (2020). Intersectional invisibility revisited: How group prototypes lead to the erasure and exclusion of Black women. *Translational Issues in Psychological Science*, 6(4), 314–324. <https://doi.org/10.1037/tps0000256>

Collins, P. H. (2015). Intersectionality's Definitional Dilemmas. *Annual Review of Sociology*, 41, 1–20. <https://doi.org/10.1146/annurev-soc-073014-112142>

Crenshaw, K. (1982). Demarginalizing the intersection of race and sex: a black feminist critique of antidiscrimination doctrine. *The Feminist Press*, 1. <https://doi.org/10.1525/sp.2007.54.1.23>.

Davis, K. (2008). Intersectionality as buzzword A sociology of science perspective on what makes a feminist theory successful. *Feminist Theory*.

<http://fty.sagepub.com/content/9/1/67.short>

Devos, T., & Banaji, M. R. (2005). American = White? *Journal of Personality and Social Psychology*, 88(3), 447–466. <https://doi.org/10.1037/0022-3514.88.3.447>

Diekmann, A. B., & Goodfriend, W. (2006). Rolling with the changes: A role congruity perspective on gender norms. *Psychology of Women Quarterly*, 30(4), 369–383.

<https://doi.org/10.1111/j.1471-6402.2006.00312.x>

Dupree, C. H., Torrez, B., Obioha, O., & Fiske, S. T. (2021). Race–status associations: Distinct effects of three novel measures among White and Black perceivers. *Journal of Personality and Social Psychology*, 120(3), 601–625. <https://doi.org/10.1037/pspa0000257>

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573–598. <https://doi.org/10.1037//0033-295X.109.3.573>

Eagly, A. H., Nater, C., Miller, D. I., Kaufmann, M., & Sczesny, S. (2020). Gender stereotypes have changed: A cross-temporal meta-analysis of U.S. public opinion polls from 1946 to 2018. *American Psychologist*, 75(3), 301–315. <https://doi.org/10.1037/amp0000494>

Eagly, A. H., Wood, W., & Diekmann, A. B. (2000). Social Role Theory of Sex Differences and Similarities: A Current Appraisal. In T. Eckes & H. M. Trautner (Eds.), *The Developmental Social Psychology of Gender* (1st ed., pp. 123–174). Lawrence Erlbaum Associates, Inc.

Else-Quest, N. M., & Hyde, J. S. (2016). Intersectionality in Quantitative Psychological Research. *Psychology of Women Quarterly*, 40(2), 155–170.

<https://doi.org/10.1177/0361684316629797>

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and

competition. *Journal of Personality and Social Psychology*, 82(6), 878–902.

<https://doi.org/10.1037/0022-3514.82.6.878>

Galinsky, A. D., Hall, E. V., & Cuddy, A. J. C. (2013). Gendered races: implications for interracial marriage, leadership selection, and athletic participation. *Psychological Science*, 24(4), 498–506. <https://doi.org/10.1177/0956797612457783>

Gallagher, N. M., & Bodenhausen, G. V. (2021). *Gender essentialism and the mental representation of transgender women and Mmen: A multimethod investigation of stereotype content*. <https://doi.org/10.31234/osf.io/t7yf9>

Ghavami, N., & Peplau, L. A. (2013). An Intersectional Analysis of Gender and Ethnic Stereotypes: Testing Three Hypotheses. *Psychology of Women Quarterly*, 37(1), 113–127. <https://doi.org/10.1177/0361684312464203>

Goff, P. A., Thomas, M. A., & Jackson, M. C. (2008). “Ain’t I a Woman?”: Towards an Intersectional Approach to Person Perception and Group-based Harms. *Sex Roles*, 59(5–6), 392–403. <https://doi.org/10.1007/s11199-008-9505-4>

Goh, J. X., & McCue, J. (2021). *Perceived Prototypicality of Asian Ethnic Subgroups in the United States and the United Kingdom*. <https://doi.org/10.31234/osf.io/tqwu3>

Gündemir, S., Homan, A. C., De Dreu, C. K. W. W., & Van Vugt, M. (2014). Think leader, think white? Capturing and weakening an implicit pro-White leadership bias. *PLoS ONE*, 9(1), e83915. <https://doi.org/10.1371/journal.pone.0083915>

Haines, E. L., Deaux, K., & Lofaro, N. (2016). The Times They Are a-Changing ... or Are They Not? A Comparison of Gender Stereotypes, 1983–2014. *Psychology of Women Quarterly*, 40(3), 353–363. <https://doi.org/10.1177/0361684316634081>

Hall, E. V., Hall, A. V., Galinsky, A. D., & Phillips, K. W. (2019). MOSAIC: A Model of Stereotyping Through Associated and Intersectional Categories. *Academy of Management*

Review, 44(3), 643–672. <https://doi.org/10.5465/amr.2017.0109>

Hall, E. V., Galinsky, A. D., & Phillips, K. W. (2015). Gender Profiling: A Gendered Race Perspective on Person–Position Fit. *Personality and Social Psychology Bulletin*, 41(6), 853–868. <https://doi.org/10.1177/0146167215580779>

Hall, E. V., Phillips, K. W., Glick, P., Washington, E., & Lee, S. (2015). *Understanding Intersectional Challenges: An Examination of the Status and Origins of Descriptive and Prescriptive Gender by Race Stereotypes*.

Hamilton, M. C. (1991). Masculine bias in the attribution of personhood: People = Male, Male = People. *Psychology of Women Quarterly*, 15(3), 393–402. <https://doi.org/10.1111/j.1471-6402.1991.tb00415.x>

Heilman, M. E. (2001). Description and Prescription: How Gender Stereotypes Prevent Women’s Ascent Up the Organizational Ladder. *Journal of Social Issues*, 57(4), 657–674. <https://doi.org/10.1111/0022-4537.00234>

Johnson, K. L., Freeman, J. B., & Pauker, K. (2012). Race is gendered: how covarying phenotypes and stereotypes bias sex categorization. *Journal of Personality and Social Psychology*, 102(1), 116–131. <https://doi.org/10.1037/a0025335>

Johnson, K. L., & Ghavami, N. (2011). At the crossroads of conspicuous and concealable: What race categories communicate about sexual orientation. *PLoS ONE*, 6(3), e18025. <https://doi.org/10.1371/journal.pone.0018025>

Kibria, N. (1998). The contested meanings of “Asian American”: racial dilemmas in the contemporary US. *Ethnic and Racial Studies*, 21(5), 939–958. <https://doi.org/10.1080/014198798329739>

Kite, M. E., & Deaux, K. (1987). Gender Belief Systems: Homosexuality and the Implicit Inversion Theory. *Psychology of Women Quarterly*, 11(1), 83–96.

<https://doi.org/10.1111/j.1471-6402.1987.tb00776.x>

Koenig, A. M., & Eagly, A. H. (2014). Evidence for the social role theory of stereotype content:

Observations of groups' roles shape stereotypes. *Journal of Personality and Social Psychology*, *107*(3), 371–392. <https://doi.org/10.1037/a0037215>

Kuo, E. E., Kraus, M. W., & Richeson, J. A. (2020). High-Status Exemplars and the

Misperception of the Asian-White Wealth Gap. *Social Psychological and Personality Science*, *11*(3), 397–405. <https://doi.org/10.1177/1948550619867940>

Lehavot, K., & Lambert, A. J. (2007). Toward a greater understanding of antigay prejudice: On

the role of sexual orientation and gender role violation. *Basic and Applied Social Psychology*, *29*(3), 279–292. <https://doi.org/10.1080/01973530701503390>

Lenth, R. V. (2021). *emmeans: Estimated Marginal Means, aka Least-Squares Means*.

<https://cran.r-project.org/package=emmeans>

Lick, D. J., & Johnson, K. L. (2016). Straight until proven gay: A Systematic bias toward straight

categorizations in sexual orientation judgments. *Journal of Personality and Social Psychology*, *110*(6), 801–817. <https://doi.org/10.1037/pspa0000052>

Livingston, R. W., & Pearce, N. A. (2009). The Teddy-Bear Effect. *Psychological Science*,

20(10), 1229–1236. <https://doi.org/10.1111/j.1467-9280.2009.02431.x>

Livingston, R. W., Rosette, A. S., & Washington, E. F. (2012). Can an Agentic Black Woman

Get Ahead? The Impact of Race and Interpersonal Dominance on Perceptions of Female Leaders. *Psychological Science*, *23*(4), 354–358.

<https://doi.org/10.1177/0956797611428079>

Pager, D., Western, B., & Sugie, N. (2009). Sequencing disadvantage: Barriers to employment

facing young black and white men with criminal records. *Annals of the American Academy of Political and Social Science*, *623*(1), 195–213.

<https://doi.org/10.1177/0002716208330793>

Pedulla, D. S. (2014). The positive consequences of negative stereotypes: Race, sexual orientation, and the job application process. *Social Psychology Quarterly*, 77(1), 75–94.

<https://doi.org/10.1177/0190272513506229>

Penner, A. M., & Saperstein, A. (2008). How social status shapes race. *Proceedings of the National Academy of Sciences of the United States of America*, 105(50), 19628–19630.

<https://doi.org/10.1073/pnas.0805762105>

Petsko, C. D., & Bodenhausen, G. V. (2019). Racial stereotyping of gay men: Can a minority sexual orientation erase race? *Journal of Experimental Social Psychology*, 83(March), 37–54. <https://doi.org/10.1016/j.jesp.2019.03.002>

Petsko, C. D., & Bodenhausen, G. V. (2020). Multifarious person perception: How social perceivers manage the complexity of intersectional targets. *Social and Personality Psychology Compass*, 14(2), 1–13. <https://doi.org/10.1111/spc3.12518>

Preddie, J. P., & Biernat, M. (2021). More than the Sum of Its Parts: Intersections of Sexual Orientation and Race as They Influence Perceptions of Group Similarity and Stereotype Content. *Sex Roles*, 84(9–10), 554–573. <https://doi.org/10.1007/s11199-020-01185-3>

Prentice, D. A., & Carranza, E. (2002). What Women and Men Should Be, Shouldn't Be, Are Allowed to Be, and Don't Have to Be: The Contents of Prescriptive Gender Stereotypes. *Psychology of Women Quarterly*, 26(4), 269–281. <https://doi.org/10.1111/1471-6402.t01-1-00066>

Ritter, B. A., & Yoder, J. D. (2004). Gender differences in leader emergence persist even for dominant women: An updated confirmation of role congruity theory. *Psychology of Women Quarterly*, 28, 187–193. <https://doi.org/10.1111/j.1471-6402.2004.00135.x>

Roberts, S. O., Weisman, K., Lane, J. D., Williams, A., Camp, N. P., Wang, M., Robison, M.,

Sanchez, K., & Griffiths, C. (2020). God as a White man: A psychological barrier to conceptualizing Black people and women as leadership worthy. *Journal of Personality and Social Psychology, 119*(6), 1290–1315. <https://doi.org/10.1037/pspi0000233>

Rosette, A. S., Koval, C. Z., Ma, A., & Livingston, R. (2016). Race matters for women leaders: Intersectional effects on agentic deficiencies and penalties. *The Leadership Quarterly, 1*–17. <https://doi.org/10.1016/j.leaqua.2016.01.008>

Rosette, A. S., Leonardelli, G. J., & Phillips, K. W. (2008). The White Standard: Racial Bias in Leader Categorization. *Journal of Applied Psychology, 93*(4), 758–777. <https://doi.org/10.1037/0021-9010.93.4.758>

Thomas, E. L., Dovidio, J. F., & West, T. V. (2014). Lost in the categorical shuffle: Evidence for the social non-prototypicality of black women. *Cultural Diversity and Ethnic Minority Psychology, 20*(3), 370–376. <https://doi.org/10.1037/a0035096>

Warner, L. R., & Shields, S. a. (2013). The Intersections of Sexuality, Gender, and Race: Identity Research at the Crossroads. *Sex Roles, 68*(11–12), 803–810. <https://doi.org/10.1007/s11199-013-0281-4>

Table 1:*Stable Prescriptive and Proscriptive Gender Stereotypes from 2002 to Present*

	Study 1			Study 2		
	M	W	<i>d</i>	M	W	<i>d</i>
Prescriptions						
Aggressive	6.10	3.15	1.88	6.15	3.11	1.59
Ambitious	8.06	5.39	1.70	7.77	5.37	1.26
Assertive	7.64	4.86	1.77	7.42	4.71	1.42
Athletic	7.72	5.97	1.11	7.76	5.81	1.02
Business sense	7.93	5.85	1.32	7.93	5.47	1.29
Career oriented	7.98	5.25	1.73	7.74	5.34	1.26
Competitive	7.71	4.77	1.86	7.44	4.82	1.37
Decisive	8.03	6.26	1.13	7.78	5.82	1.03
Defends own beliefs	7.53	5.80	1.09	7.39	5.61	0.93
Forceful	6.40	3.67	1.73	6.00	3.32	1.40
High self-esteem	7.73	6.39	0.85	7.57	6.41	0.61
Intelligent	7.88	6.67	0.77	7.63	6.54	0.57
Leadership ability	8.09	5.63	1.56	7.93	5.12	1.47
Rational	7.62	6.57	0.67	7.64	6.33	0.69
Self-reliant	8.17	6.26	1.21	7.85	5.89	1.03
Strong personality	7.48	4.50	1.89	7.34	4.71	1.38
Willing to take risks	7.46	5.45	1.28	7.41	4.83	1.35
Masculine	8.03	2.28	3.65	7.99	2.36	2.95
Attention to appearances	6.98	7.77	-0.51	6.45	7.83	-0.73
Express emotion	4.73	5.94	-0.76	4.41	6.40	-1.04
Loves children	6.49	7.75	-0.80	6.37	7.71	-0.70
Patience	6.46	7.86	-0.89	6.17	7.59	-0.75
Polite	6.82	7.74	-0.59	6.75	7.86	-0.58
Sensitive	4.79	6.62	-1.16	4.30	6.89	-1.36
Warm and Kind	6.36	8.01	-1.04	6.11	7.73	-0.85
Wholesome	6.20	7.34	-0.73	6.12	7.34	-0.63
Feminine	2.16	8.08	-3.76	2.34	8.00	-2.97
Proscriptions						
Approval seeking	3.90	5.39	-0.95	3.81	5.70	-0.99
Child-like	2.45	4.20	-1.11	2.78	4.56	-0.93
Emotional	3.45	4.93	-0.94	3.38	5.31	-1.01
Gullible	2.17	4.09	-1.22	2.44	4.60	-1.13
Impressionable	3.76	5.40	-1.04	3.98	6.05	-1.08
Melodramatic	2.25	3.25	-0.64	2.59	4.07	-0.77
Naive	2.16	4.62	-1.56	2.66	4.83	-1.14
Shy	2.97	5.05	-1.32	3.14	5.10	-1.03
Weak	1.77	3.96	-1.39	2.15	4.71	-1.34
Yielding	3.59	5.95	-1.50	3.70	6.37	-1.40
Arrogant	4.03	2.16	1.19	4.67	2.71	1.02
Controlling	4.63	2.68	1.24	5.16	3.05	1.11
Cynical	4.23	3.16	0.68	4.21	3.22	0.51
Promiscuous	4.03	3.04	0.63	4.72	3.54	0.62
Rebellious	5.01	3.59	0.90	5.10	3.14	1.02
Stubborn	4.62	3.11	0.96	5.19	3.34	0.97

Note: *M* and *W* refers to the mean desirability for the man and woman target, respectively, in the control conditions of Studies 1 and 2. Shaded rows means that men had higher prescriptive/proscriptive norms than women. Unshaded rows means that women had higher prescriptive/proscriptive norms than men.

Figure 1:

Androcentrism in Gender Stereotypes (Study 1)

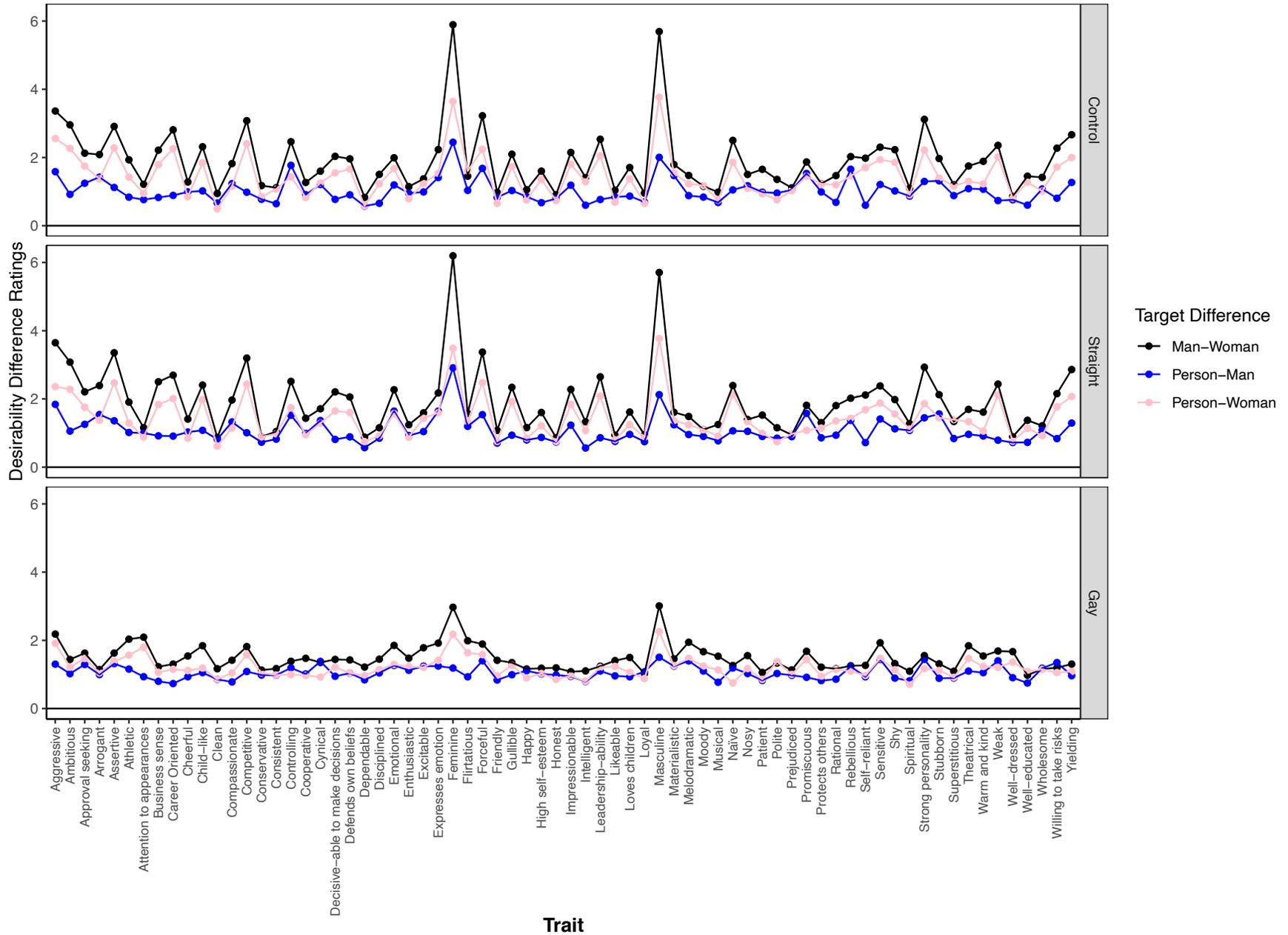


Figure 2:

Androcentrism in Gender Stereotypes (Study 2)

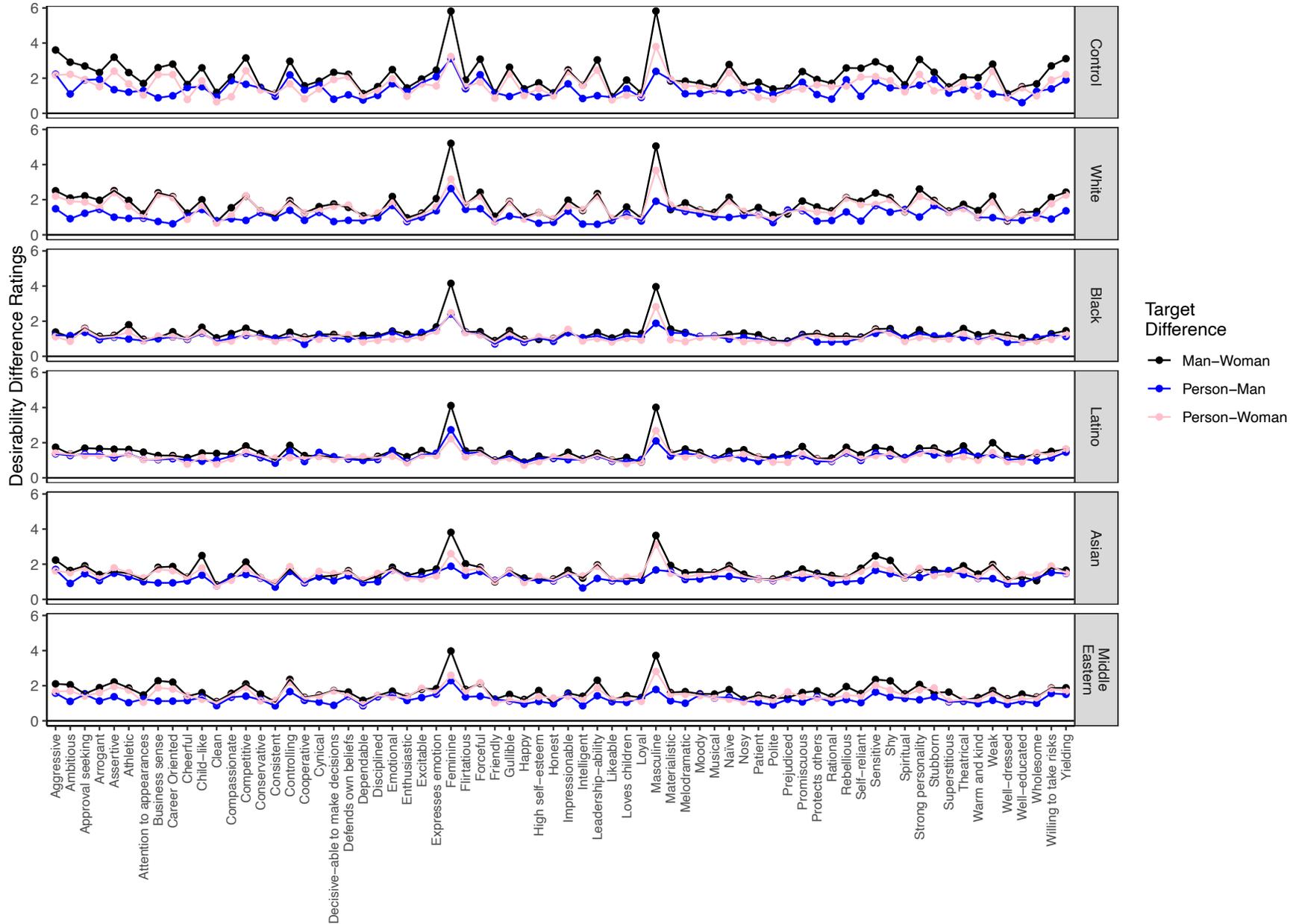


Figure 3:

Heterocentrism in Gender Stereotypes

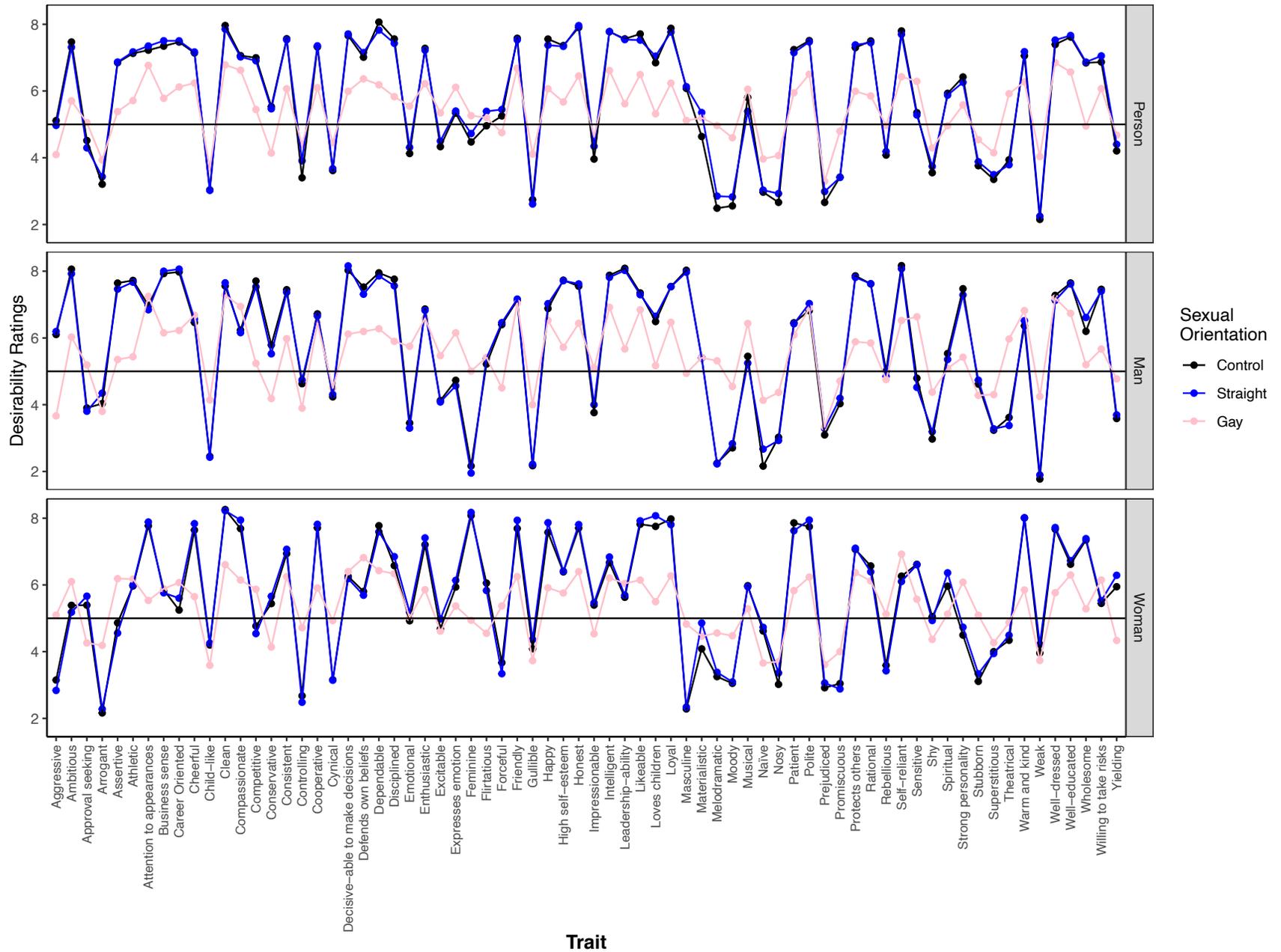


Figure 4:

Gender Differences in Prescriptive Stereotypes for Gay and Straight Targets

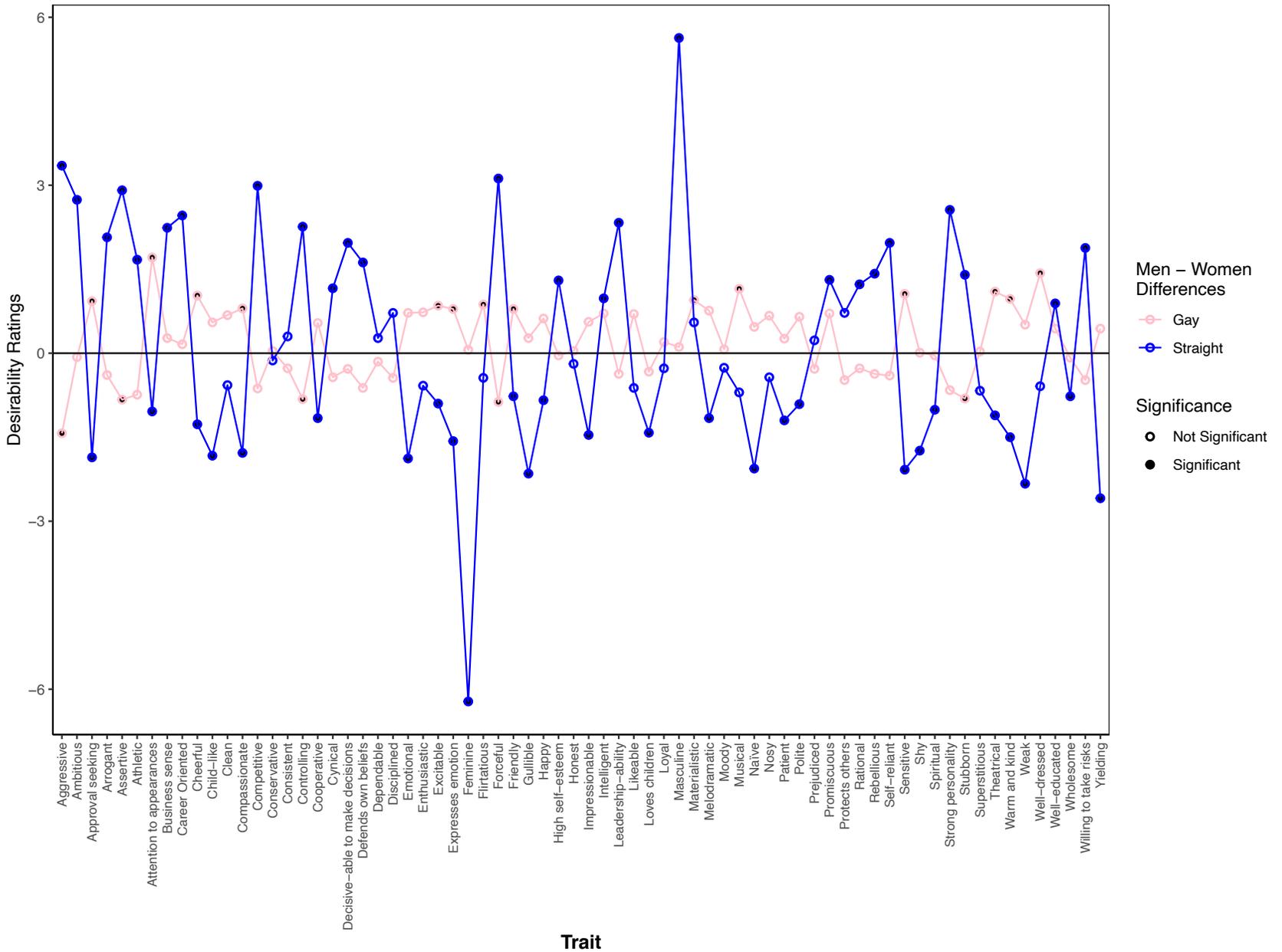


Figure 5:

The Desirability to be Masculine and Feminine by Race (Study 2).

