

Intersecting Race and Gender Cues are Associated with Perceptions of Gay Men's Preferred Sexual Roles

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Abstract Preferences for anal sex roles (top/bottom) are an important aspect of gay male identity, but scholars have only recently begun to explore the factors that covary with these preferences. Here, we argue that the gendered nature of both racial stereotypes (i.e., Black men are masculine, Asian men are feminine) and sexual role stereotypes (i.e., tops are masculine, bottoms are feminine) link the categories Asian/bottom and the categories Black/top. We provide empirical evidence for these claims at three levels of analysis: At the cultural level based upon gay men's stereotypic beliefs about others (Study 1), at the interpersonal level based upon gay men's perceptions of others' sexual role preferences (Study 2), and at the intrapersonal level based upon racially diverse men's self-reported sexual roles on a public hookup website (Study 3). These studies offer the first systematic evidence of linkages between race categories and sexual roles in gay male communities.

Keywords Sexual orientation · Sexual position · Sexual role · Insertive sexual partner · Receptive sexual partner

Introduction

Sexual role preferences are an important aspect of gay identity, allowing men to establish “rules of engagement” and select part-

ners with complementary behavioral tendencies (Carrier, 1977; Moskowitz, Rieger, & Roloff, 2008; Wei & Raymond, 2011). Specifically, there are three sexual role preferences that gay men frequently endorse: *top* (a man who prefers to be the insertive partner during anal sex), *bottom* (a man who prefers to be the receptive partner during anal sex), and *versatile* (a man who is content being the insertive or receptive partner during anal sex). While not all gay men identify with one of these three labels, many do and they explain a large portion of variance in these men's sexual behaviors (Moskowitz et al., 2008).

Alongside descriptive research about gay men's sexual role preferences, researchers have begun to examine overlap between these preferences and other personal attributes. For example, several studies have indicated gendered overlap with sexual role preferences, such that feminine men identify as and are perceived to be bottoms whereas masculine men identify as and are perceived to be tops (Carrier, 1977; Tskhay & Rule, 2013a; Weinrich et al., 1992). While certainly intriguing, research about correlates of gay men's sexual role preferences has focused primarily on gendered features among White targets. However, gay communities are diverse, and there is a growing recognition of the importance of intersectional identities in social perception (Cole, 2009; Purdie-Vaughns & Eibach, 2008). If assessments of sexual role preferences are indeed influenced by gendered cues, then these assessments may also be influenced by other features that vary along gendered lines. In particular, we propose that racial groups are imbued with gendered information, such that Asian men are perceived to be feminine and Black men are perceived to be masculine. It follows that these racial groups should trigger specific beliefs about gay men's sexual role preferences (Asian = bottom, Black = top). Here, we tested this hypothesis by examining overlap between gay men's race category memberships, gendered features, and sexual role preferences at multiple levels of analysis.

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Sexual Roles and Overlapping Beliefs About Race and Gender

As noted above, sexual role preferences describe the behavioral tendencies of gay men (Moskowitz et al., 2008). However, their impact does not end there: Sexual role preferences are imbued with broader stereotypic information that guides impressions of men's appearances and personalities (Hoppe, 2011). For example, sexual role preferences are commonly associated with beliefs about gender typicality. Populations ranging from the Caribbean to Mexico, China, and the United States share the belief that tops are masculine and dominant whereas bottoms are feminine and submissive (Carballo-Diéguez et al., 2004; Gil, 2007; Jeffries, 2009; Johns, Pingel, Eisenberg, Santana, & Bauermeister, 2012; Weinrich et al., 1992; Zheng, Hart, & Zheng, 2013). Moreover, gay men generally describe tops as muscular, tall, and well-endowed, whereas they describe bottoms as slender and less well-endowed (Carballo-Diéguez et al., 2004). These effects also play out in self-identifications, such that men who embody traditionally masculine features (e.g., large penis, muscular) tend to identify as tops whereas men who embody more feminine features (e.g., small penis, slender) tend to identify as bottoms (Moskowitz & Hart, 2011). Thus, gay men's sexual roles strongly overlap with gendered attributes, such that tops are associated with masculinity and bottoms are associated with femininity.

While beliefs linking gay men's sexual roles to their gendered features abound, evidence regarding the validity of these beliefs is more mixed. Some studies have suggested that such gendered beliefs are valid. For example, Carrier (1977) found that men identifying as bottoms were more likely than were men identifying as tops to have enjoyed gender-atypical activities as children. Weinrich et al. (1992) found that men who reported a feminine gender identity early in life were more likely to identify as bottoms than as tops during adulthood. Tskhay and Rule (2013a) found that attending to gendered features affords accurate perceptions of gay men's sexual role preferences. However, other studies have questioned the validity of the association between gender typicality and sexual roles. Kippax and Smith (2001) reported that some self-identified bottoms actively resist feminine stereotypes, garnering power while still enacting the bottom role. Moreover, a study of gay men in New York found no significant differences between tops and bottoms in their responses to self-report measures tapping gender role identity during childhood, adolescence, and adulthood (Wegesin & Meyer-Bahlburg, 2000). Thus, the accuracy of people's gendered stereotypes about tops and bottoms may or may not be accurate. Still, the fact remains that widespread belief systems dictate that bottoms are feminine and tops are masculine in various aspects of their behavior, personality, and appearance.

If expectations about tops and bottoms indeed vary along gendered lines, then they should also covary alongside other features associated with gender, especially because gendered beliefs strongly

impact person perception (Bem, 1993; Deaux & Lewis, 1984). As just one example of the powerful associations between gender and other social categories, two recent studies uncovered strong overlap in people's beliefs about gender and race, such that Black individuals of both sexes were perceived to embody masculine traits whereas Asian individuals of both sexes were perceived to embody feminine traits (Goff, Thomas, & Jackson, 2008; Johnson, Freeman, & Pauker, 2012). Not only do gendered cues overlap with explicit beliefs about other social categories, but they also guide basic visual processing and categorization (Zebrowitz & Montepare, 2006). Specifically, Asian faces of both sexes have a relatively feminized facial appearance whereas Black faces of both sexes have a relatively masculinized facial appearance, leading to faster and more accurate sex categorizations of Black men and Asian women relative to Black women and Asian men (Goff et al., 2008; Johnson et al., 2012). Moreover, these gendered expectations of racial groups impact sexual orientation categorizations, such that perceivers are more likely to categorize Asian men as gay relative to Black men (Johnson & Ghavami, 2011). Finally, these associations can even bias the social roles that people fulfill, such that White women prefer Black relative to Asian men in romantic relationships and White men prefer Asian relative to Black women in romantic relationships (Galinsky, Hall, & Cuddy, 2013). Thus, race and gender categories are strongly related, with implications for social perceptions as well as personal relationships.

In summary, existing studies have revealed that both race categories and sexual role preferences vary along gendered lines. In light of this common association, we propose that racial groups are linked to sexual roles in the gay community. Specifically, bottoms are widely believed to be feminine, a trait often ascribed to Asian men; tops are widely believed to be masculine, a trait often ascribed to Black men. By extension, we hypothesized that the categories Black and top and the categories Asian and bottom are linked due to the overlapping gender cues communicated by each category. Despite theoretical rationale for these claims, however, systematic evidence is sparse. Below, we use sexual scripting theory as a framework to develop and test specific hypotheses linking race categories to gay men's preferred sexual roles.

Sexual Scripting Theory and Sexual Role Preferences

Sexual scripting theory (Gagnon & Simon, 1973, 1986) provides a useful framework for understanding the proposed links between race categories and sexual role preferences. The theory specifies three ways in which sexual belief systems gain traction: *cultural scripts* (i.e., historical narratives and shared belief systems dictating appropriate sexual desires and behaviors), *interpersonal scripts* (i.e., the ways in which individuals think about and infer others' sexual desires and behaviors), and *intrapsychic scripts* (i.e., the ways in which individuals think about their own sexual desires and behaviors). Once established, these scripts are

thought to inform beliefs about oneself and others, affecting how people understand and practice sex (Parker & Gagnon, 1995).

Drawing upon the levels of analysis described by sexual scripting theory, we propose that evidence for an association between race categories and sexual role preferences will emerge in cultural, interpersonal, and intrapersonal domains. Some limited evidence supports each of these claims. At the cultural level, Wilson et al. (2009) found that men who used the Internet to find bareback sex partners often described Black partners in distinctly masculine terms reminiscent of tops (e.g., aggressive, dominant, hyper-masculine, macho, well-endowed) and Asian partners in distinctly feminine terms reminiscent of bottoms (e.g., submissive, effeminate, small physical stature, less well-endowed). While these trends are consistent with our predictions, they relied on a small qualitative sample of men who sought bareback sex, precluding a more general test of gay men's overlapping beliefs about race categories and sexual roles.

At the interpersonal level, several studies have offered suggestive evidence linking race categories to perceptions of gay men's sexual roles. In a study of male escorts, Logan (2010) uncovered a price premium for Black tops but a price penalty for Black bottoms, suggesting that consumers may value escorts whose race is consistent with expectations about their sexual role. Tskhay and Rule (2013a) found that straight perceivers utilized gendered facial cues to label White gay men's preferred sexual roles, categorizing feminine men as bottoms and masculine men as tops. Still, it remains possible that race category membership systematically biases these perceptions, especially in light of recent evidence that Black men exhibit relatively masculine facial cues whereas Asian men exhibit relatively feminine facial cues (Johnson et al., 2012).

Intrapersonally, some evidence supports the notion that race may be associated with gay men's reports of their own sexual role preferences. For example, Han (2006) argued that gay men enact gendered stereotypes associated with their racial identity, such that Black men display a dominant, masculine form of sexuality (e.g., topping) whereas Asian men display a submissive, feminine form of sexuality (e.g., bottoming). Furthermore, Phua (2007) documented that some Asian gay men deliberately fulfill feminine stereotypes in order to attract mates who expect Asian men to be submissive. Thus, previous research suggests that links between race, gender, and sexual roles may be evident in gay men's self-presentations. However, most of this research has been qualitative and restricted to studies of Asian men; quantitative research that includes Black and White men is necessary to corroborate the findings.

The Current Research

Based on available evidence, we propose that the gendered information shared by race categories and sexual roles results in overlap between the categories Black/masculine/top and the categories Asian/feminine/bottom. Moreover, we propose that

these links are so robust that they will emerge at diverse levels of analysis. At the cultural level, we predict that gay men will endorse similarly gendered stereotypes about race categories and sexual roles, such that the categories Asian and bottom are thought of as feminine whereas the categories Black and top are thought of as masculine. At the interpersonal level, we predict that gay men will rely on these beliefs to determine other men's sexual role preferences, labeling Asian men as bottoms due to their relatively feminine appearance and Black men as tops due to their relatively masculine appearance. At the intrapersonal level, we predict that these associations will play out in self-identifications, such that Asian men will tend to publicly identify as bottoms whereas Black men will tend to publically identify as tops.

Study 1

Accumulating evidence suggests that gay men associate racial groups with specific sexual roles. Indeed, perceivers have robustly gendered beliefs about sexual roles, maintaining that tops are masculine and dominant whereas bottoms are feminine and submissive (Gil, 2007; Weinrich et al., 1992). Moreover, perceivers endorse distinctly gendered beliefs about racial groups, indicating that Black individuals are masculine and dominant whereas Asian individuals are feminine and submissive (Galinsky et al., 2013; Goff et al., 2008; Johnson et al., 2012). These observations suggest that beliefs about the categories Asian/bottom may share feminine content while beliefs about the categories Black/top may share masculine content. In Study 1, we tested this overlap in gay men's gendered stereotypes of racial groups and sexual roles.

Method

Participants

A total of 126 self-identified gay men from the U.S. completed an online study.¹ Participants were 20 years old on average ($SD = 8.98$ years) and most reported a high level of education (91 % attended college). Furthermore, most participants identified as White (74 %); the remainder identified as Asian (8 %), Black (10 %), Latino (4 %), or multiracial (5 %).

Procedure

We recruited openly gay participants from Amazon Mechanical Turk for a study about their knowledge of cultural stereotypes. After providing consent, participants were redirected to the survey-hosting website Qualtrics, where they completed a modified version of the Princeton Trilogy (Katz & Braly, 1933; see also

¹ We excluded participants who failed to report their sexual orientation or indicated that they were straight ($n = 2$).

Table 1 Most frequently endorsed traits chosen within each race category and sexual role in Study 1

Asian	Black	White	Top	Bottom
Intelligent (33)	Athletic (22)	Materialistic (20)	Aggressive (27)	Sensitive (27)
Scientifically-minded (27)	Loud (20)	Very religious (18)	Straightforward (23)	Pleasure-loving (23)
Loyal to family ties (21)	Lazy (17)	Conservative (17)	Athletic (21)	Quiet (21)
Brilliant (19)	Musical (17)	Industrious (16)	Pleasure-loving (19)	Sexually perverse (19)
Shrewd (17)	Criminal (16)	Intelligent (15)	Sportsmanlike (18)	Kind (18)
Quiet (17)	Aggressive (15)	Practical (14)	Arrogant (17)	Artistic (17)
Reserved (16)	Poor (15)	Boastful (13)	Sexually perverse (17)	Reserved (17)
Meditative (14)	Violent (15)	Tradition-loving (13)	Passionate (17)	Generous (17)
Industrious (14)	Low intelligence (12)	Sophisticated (12)	Suave (16)	Sensual (16)
Tradition-loving (14)	Uneducated (12)	Gluttonous (12)	Loud (15)	Passionate (15)
Efficient (14)		Ambitious (12)		
		Conventional (12)		
$M = 4.46, SD = 0.75$	$M = 3.89, SD = 0.99$	$M = 4.31, SD = 0.79$	$M = 3.60, SD = 0.91$	$M = 5.25, SD = 0.95$

The number of participants who listed each trait appears in parentheses, and mean gender ratings of the traits within each category appear below. We aimed to list the top 10 traits in each category, but there were several ties in the 10th position. In these cases, we listed all traits that tied for the 10th position

Devine & Elliot, 1995; Galinsky et al., 2013; Gilbert, 1951) to test for overlap in beliefs about race categories and sexual roles. We randomly assigned participants to evaluate a list of attributes along one of three dimensions—gender, race, or sexual role. The list of attributes included the original 84 descriptors used by Katz and Braly (1933), such as intelligent, lazy, honest, and kind, as well as 9 descriptors that were added in an often-cited replication (Devine & Elliot, 1995).

In the gender condition, participants ($n = 27$) judged the gender typicality of each trait along a 9-point continuum ($1 = \textit{Very Masculine}$ to $9 = \textit{Very Feminine}$).² In the race condition, participants ($n = 48$) chose the top 10 attributes that they felt best described the cultural stereotype of each of three racial groups: Black, White, and Asian (in random order). The instructions read: “Below is a list of traits. Please read through the list and identify those 10 traits that make up the cultural stereotype of Black [Asian/White] people. Note that these characteristics may or may not reflect your personal beliefs. We are interested in the traits that you know to be a part of the cultural stereotype of Black [Asian/White] people, whether or not you believe the stereotypes to be true.” In the sexual role condition, participants ($n = 51$) chose the top 10 attributes that best described the cultural stereotype of each of two sexual roles: top and bottom (in random order). We defined tops as “men who prefer to be the insertive partner during anal sex” and bottoms as “men who prefer to be the receptive partner during anal

sex;” otherwise, instructions for the race and sexual role conditions were identical. After completing their ratings, participants provided demographic information before being debriefed.

Results and Discussion

We began by exploring the most common traits chosen to describe each race and sexual role (see Table 1). In particular, we listed the 10 most frequently selected traits within each category. There were several ties in the tenth position; in these cases, we listed all of the traits that tied for the tenth position, resulting in uneven lists across categories. Collectively, these lists revealed overlap between the categories Asian/bottom and between the categories Black/top. Out of 93 possible descriptors, the categories Asian and bottom shared the primary traits *reserved* and *quiet*, and the categories Black and top shared the primary traits *athletic*, *aggressive*, and *loud*. Although two and three overlapping traits may not initially seem noteworthy, recall that we examined matches only among the most frequently selected traits within each category. The fact that we uncovered two and three matching words among these primary traits is compelling because the chances of a match are quite low given an initial bank of 93 words.³

Next, we calculated the mean gender rating for each trait based upon responses from participants in the gender condition, and we averaged these values within each race and sexual role condition to obtain an overall gender score for each category.

² We recruited fewer men for the gender condition than for the race and sexual role conditions because the gender ratings were fully within-subject (i.e., participants evaluated all traits on a continuous gender scale). Thus, fewer observations were required to achieve high power in the gender condition compared to the checklists in the other two conditions. Because gay men are somewhat difficult to survey in large numbers, this strategy helped to ensure appropriate power while being sensitive to the constraints of Mechanical Turk’s online sample.

³ We calculated prior probabilities using combinatorics, which revealed that the chances of obtaining exactly two matches in a 10 word list given an original sample of 93 words is $[C(10,3)*C(83,7)]/C(93,10) \approx 22.0\%$ and the chances of exactly three matches is $[C(10,4)*C(83,6)]/C(93,10) \approx 6.2\%$.

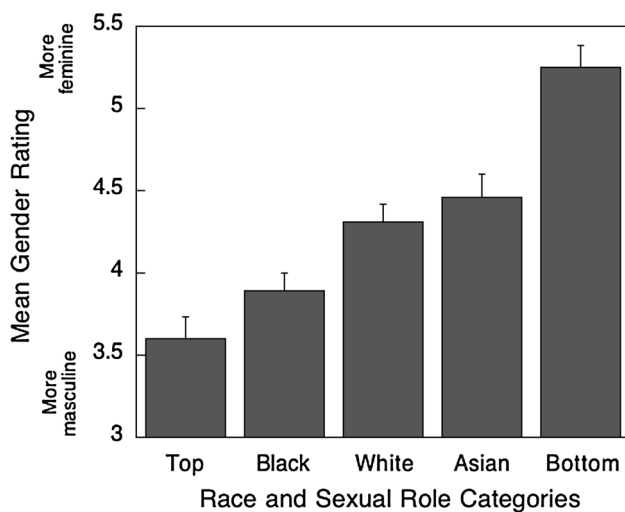


Fig. 1 Mean gender ratings of the traits chosen as most characteristic of each race category and sexual role in Study 1. Error bars represent SEM within each race and sexual role category

These means were ordered as expected (Fig. 1). In particular, beliefs about the category Asian were more feminine than beliefs about the category White, which were more feminine than beliefs about the category Black ($M_s = 4.46, 4.31, \text{ and } 3.89$, respectively). Similarly, beliefs about bottoms were more feminine than beliefs about tops ($M_s = 5.25 \text{ and } 3.60$, respectively). We also noted that the mean gender rating of traits chosen to represent the categories Asian and bottom were similar ($M_s = 4.46 \text{ and } 5.25$, respectively), as were the mean gender ratings of traits chosen to represent the categories Black and top ($M_s = 3.89 \text{ and } 3.60$, respectively). These findings provided initial support for our hypothesis that gay men's beliefs about the categories Asian and bottom are distinctly feminine whereas their beliefs about the categories Black and top are distinctly masculine.

To provide a stronger statistical test of our hypotheses, we examined the gendered nature of the traits chosen as describing the cultural stereotype of each race category and sexual role. Again, we calculated the average gender score for each trait based upon responses from participants in the gender condition. Then, we regressed the race categories (Asian, Black, White) and sexual roles (top, bottom) onto these gender ratings to determine how the gendered nature of the stereotypes differed across categories. Because each participant provided multiple trait ratings for multiple categories (i.e., 10 traits of tops, 10 traits of bottoms), we analyzed the data with generalized estimating equations (Zeger & Liang, 1986), which are multilevel regression models that account for within-subject dependencies in data. Unlike other strategies for analyzing multilevel data (e.g., random coefficient models), generalized estimating equations employ quasi-likelihood estimation to treat within-cluster dependency as a nuisance, using a working correlation matrix to correct for this dependency and provide reliable estimates of fixed effects and their standard errors. Because our hypotheses did not concern random effects, this method

provided the most parsimonious statistical approach to our data, allowing us to examine fixed effects of interest while simultaneously controlling for the nested structure of the responses. In these analyses, we treated race as a multi-categorical predictor ($0 = \text{Asian}, 1 = \text{White}, 2 = \text{Black}$) and sexual role as a dichotomous predictor ($0 = \text{bottom}, 1 = \text{top}$) of gender ratings (continuous).

First, we regressed gender ratings onto race. Results indicated significant differences in the gendered nature of beliefs about various race categories, $\chi^2(2) = 4.85, p = .01$. Specifically, traits associated with the category Asian were more feminine than traits associated with the category Black, $B = -0.17, SE = 0.06, z = -3.03, p = .002$, but they did not differ from traits associated with the category White, $B = -0.06, SE = 0.06, z = -1.01, p = .31$. Moreover, traits associated with the category Black were less feminine than traits associated with the category White, $B = -0.12, SE = 0.07, z = -1.73, p = .08$. We also regressed gender ratings onto sexual role. Gender ratings differed significantly across sexual roles, $\chi^2(1) = 208.06, p < .001$. As expected, traits associated with bottoms were more feminine than traits associated with tops, $B = -0.84, SE = 0.06, z = -14.42, p < .001$.

Collectively, these findings replicated recent work regarding the gendered nature of race stereotypes (Galinsky et al., 2013; Johnson et al., 2012), insofar as gay men reported beliefs that Asian men are feminine and Black men are masculine. The findings also extended previous work on the gendered nature of sexual role stereotypes (Bailey, Kim, Hills, & Linsenmeier, 1997; Gil, 2007; Weinrich et al., 1992), demonstrating that self-identified gay men associate bottoms with femininity and tops with masculinity. Most importantly, Study 1 provided systematic evidence of overlap in gendered stereotypes between the categories Asian/bottom and Black/top. Of 93 possible trait descriptions, participants used some of the same feminine words to describe the categories Asian and bottom and some of the same masculine words to describe the categories Black and top. Collectively, then, gay men shared gendered beliefs about both race categories and sexual roles, resulting in overlap in their conceptions of Asian men and bottoms and of Black men and tops.

Study 2

In Study 1, we found that gay men endorse gendered beliefs about race categories and sexual roles, such that the categories Black/top were similarly stereotyped as masculine whereas the categories Asian/bottom were similarly stereotyped as feminine. Importantly, however, these findings were limited in at least two ways. First, such explicit stereotypes reflect common stereotypical knowledge shared by gay men, but they do not necessarily indicate how gay men use that knowledge to interpret the sexual role preferences of others. Second, Study 1 revealed broad relations between race categories and gender stereotypes and between sexual roles and gendered stereotypes, but the checklist format of the data precluded a mechanistic analysis of the interrelationship between all three factors. Specifically, the data were ill suited to test

whether gendered stereotypes statistically mediated the association between race categories and sexual role preferences. Study 2 addressed both of these issues by requiring participants to provide judgments of the preferred sexual role and gendered appearance of individual targets who varied systematically in their racial appearance. We predicted that perceivers would tend to categorize Black targets as tops because Black faces appear phenotypically masculine, but that they would tend to categorize Asian targets as bottoms because Asian faces appear phenotypically feminine.

Method

Participants

A total of 57 self-identified gay men from the U.S. completed an online study.⁴ Participants were 30.32 years old on average ($SD = 8.05$ years) and most reported a high level of education (86 % attended college). Furthermore, most identified as White (74 %), though several identified as Black (14 %), Asian (7 %), or multiracial (5 %). Participants were fairly diverse in terms of their own preferred sexual role (2 % exclusive bottom, 26 % bottom/versatile, 40 % versatile, 23 % top/versatile, 9 % exclusive top).

Procedure

As in Study 1, we recruited openly gay participants from Amazon Mechanical Turk for a study about their perceptions of other people. After providing consent, participants were redirected to the survey-hosting website Qualtrics, where they evaluated 75 male faces from Johnson et al. (2012). These stimuli were created with face modeling software that estimates phenotypic features based upon parameters observed in several hundred three-dimensional face scans of the human population (FaceGen Modeler) (Blanz & Vetter, 1999). Specifically, the faces depicted 15 unique male identities whose apparent race varied along a 5-level continuum ranging from “Very Asian” to “Very Black” (Fig. 2). We cropped each image so that internal facial structures (e.g., eyes, nose, brow) were visible, but hair was not.

After providing consent, participants viewed each target face twice, providing a unique set of judgments in each block. Stimuli were presented randomly within each block and the order of blocks was counterbalanced across participants. In one block, participants rated each target’s preferred sexual role ($1 = exclusively\ bottom$ to $10 = exclusively\ top$). In the other block, participants rated each target’s gendered appearance ($1 = masculine$ to $10 = feminine$). Afterward, participants provided demographic information before being debriefed.

⁴ We excluded participants who failed to report their sexual orientation or indicated that they were straight ($n = 2$).

Results and Discussion

We conducted preliminary analyses with generalized estimating equations to test our hypothesis that perceived sexual roles varied as a function of both race and gender phenotypes. Then, to test whether gendered features drove the association between racial phenotype and perceived sexual role, we employed the multilevel mediation approach described by Bauer, Preacher, and Gil (2006). This is a widely accepted method for assessing mediation with nested data, providing unbiased estimates of indirect and total effects using Monte Carlo simulations with 10,000 draws. In all analyses, we treated targets’ apparent race as a continuous variable ($-2 = Very\ Asian$, $-1 = Slightly\ Asian$, $0 = White$, $1 = Slightly\ Black$, $2 = Very\ Black$). When used as a predictor, we scored gender ratings continuously after mean-centering.

We began by testing the association between targets’ racial phenotypes and their presumed sexual roles. Specifically, we regressed perceived sexual role onto apparent race. As targets moved from Very Asian to Very Black, they were more likely to be perceived as tops, $B = 0.41$, $SE = 0.07$, $z = 6.22$, $p < .001$ (Fig. 3). This effect was not moderated by participant preferred sexual role ($p = .18$), participant age ($p = .76$), participant education ($p = .78$), or participant race ($p = .11$). In fact, to test the robustness of the effect, we recomputed the original regression while controlling for all demographic variables collected during the study. After accounting for these covariates, the association between apparent race and perceived sexual role remained identical after rounding, $B = 0.41$, $SE = 0.07$, $z = 6.22$, $p < .001$.

Next, we tested the association between targets’ perceived gender and presumed sexual roles. Specifically, we regressed perceived sexual role onto perceived gender. As gendered perceptions changed from feminine to masculine, targets were more likely to be perceived as tops, $B = -0.35$, $SE = 0.05$, $z = -7.49$, $p < .001$ (Fig. 4). Again, this effect was not moderated by participant preferred sexual role ($p = .47$), participant age ($p = .72$), participant education ($p = .44$), or participant race ($p = .29$). To test the robustness of the effect, we recomputed the original regression while controlling for all demographic variables collected during the study. After accounting for these covariates, the association between perceived gender and perceived sexual role remained identical after rounding, $B = 0.35$, $SE = 0.05$, $z = -7.49$, $p < .001$.

Finally, we used the multilevel approach outlined by Bauer et al. (2006) to test whether perceived gender statistically mediated the association between apparent race and perceived sexual role. Monte Carlo simulations revealed a significant indirect effect of perceived gender ($p < .001$, 95 % CI [0.04–0.11]). This finding indicates that Black men were labeled as tops in part because they were perceived to be masculine, and Asian men were labeled as bottoms in part because they were perceived to be feminine.

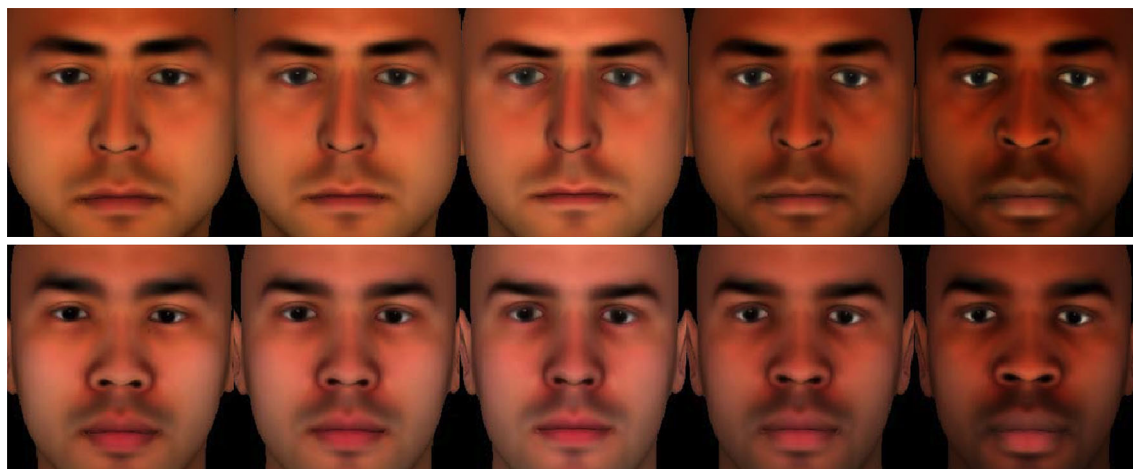


Fig. 2 Example stimuli for Study 2, depicting two male faces that range in phenotypic features from Asian (*left*) to White (*middle*) to Black (*right*)

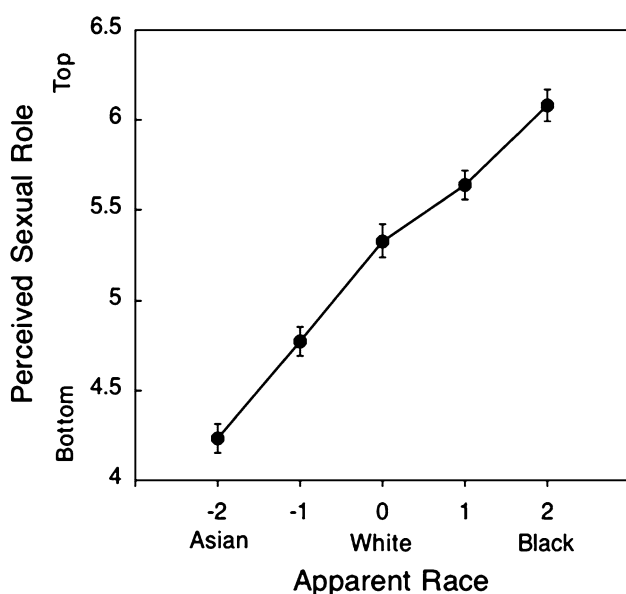


Fig. 3 Perceived sexual role as a function of targets' apparent race in Study 2. *Error bars* represent SEM within each apparent race category

Study 2 built upon our initial findings by demonstrating that overlapping beliefs about the gendered nature of race categories and sexual role preferences guide interpersonal perceptions. In particular, we found that targets were likely to be labeled as bottoms when they appeared phenotypically Asian, but they were likely to be labeled as tops when they appeared phenotypically Black. Moreover, these race-based categorizations occurred due to overlap between gendered and racial features in the face: Asian male faces were labeled as bottoms because they appeared relatively feminine, and Black male faces were labeled as tops because they appeared relatively masculine. Collectively, these findings reveal that overlapping race and gender cues drive perceptions of gay men's preferred sexual roles.

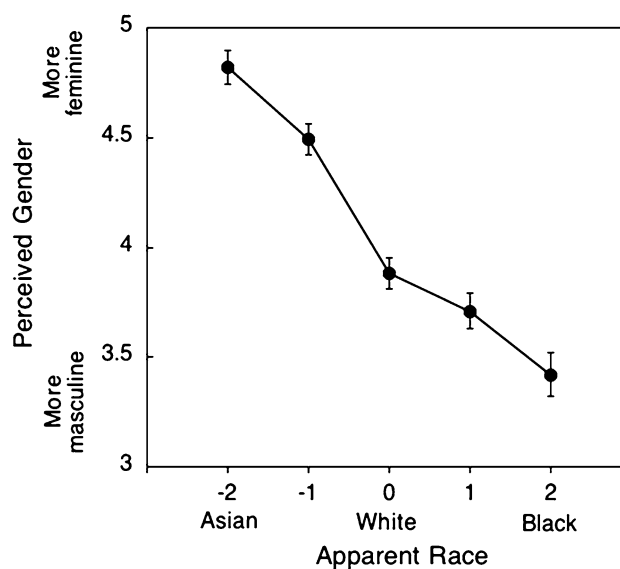


Fig. 4 Perceived gender as a function of targets' apparent race in Study 2. *Error bars* represent SEM within each apparent race category

Study 3

Thus far, we have demonstrated that gendered information—both semantic and visual—links gay men's perceptions of race categories to their perceptions of sexual roles. Up to now, however, our data have been mute about the reliability of these knowledge structures. In light of our initial findings that gay men endorsed gendered stereotypes linking the categories Asian/bottom and Black/top (Study 1), and that gay men actively used these stereotypes to identify other men's preferred sexual roles (Study 2), we reasoned that racial minority men might identify their own sexual role preferences in a similar manner. That is, we hypothesized that the stereotypes and perceptual biases we uncovered may be veridical insofar as Asian men tend to publically identify themselves as bottoms and Black men tend to publically identify themselves as

tops. We tested these hypotheses with a content analysis of gay men's profiles on a popular hookup website.

Method

Procedure

We coded the preferred sexual role (*bottom*, *bottom/versatile*, *top/versatile*, *top*), race (*Asian*, *White*, *Black*), and age (continuous) listed in profiles on a free and public hookup website for men who have sex with men (www.manhunt.net).⁵ We accessed the website on 10 consecutive days and recorded information from profiles displayed on the first 10 pages for each of 10 major cities (one city per day): Atlanta, Boston, the District of Columbia, Detroit, Houston, Los Angeles, New York, Philadelphia, San Francisco, and Seattle. Only profiles that displayed all of the relevant information (i.e., sexual role, race, age) were coded for analysis.

Results and Discussion

Our content analysis yielded 879 profiles, representing roughly 10% of the profiles from each major city that we sampled. On average, website users were 37.92 years old ($SD = 9.98$) and 18% identified as bottom, 27% identified as bottom/versatile, 26% identified as top/versatile, and 29% identified as tops. Furthermore, 8% of profiles ($n = 69$) belonged to Asian men, 6% ($n = 48$) belonged to Black men, and 87% ($n = 762$) belonged to White men.

To determine whether gay men's self-reported sexual role preferences co-varied with their race, we first employed Chi square tests. For ease of interpretation, we collapsed men who identified as bottom and men who identified as bottom/versatile into a single category (*bottom*), and we collapsed men who identified as top and men who identified as top/versatile into a single category (*top*).⁶ As

⁵ Most studies of gay men's sexual role preferences, including the initial studies reported here, have focused on the categories "bottom" and "top." To remain consistent with that work, we excluded profiles that listed "versatile" as their sexual role preference. Although it is an interesting phenomenon, a better understanding of sexual role versatility awaits future investigation.

⁶ We also examined these effects with bottom, bottom/versatile, top/versatile, and top as separate categories. The pattern of results was conceptually identical to those presented above. Overall, sexual role preferences varied significantly across race categories, $\chi^2(6) = 70.50, p < .001$. Among Asian men, 44% identified as bottoms, 38% identified as bottom/versatile, 10% identified as top/versatile, and 7% identified as tops. Among Black men, 2% identified as bottoms, 10% identified as bottom/versatile, 40% identified as top/versatile, and 48% identified as tops. Among White men, 16% identified as bottoms, 28% identified as bottom/versatile, 30% identified as top/versatile, and 26% identified as tops. Thus, we obtained similar results when analyzing the categories bottom and bottom/versatile and the categories top and top/versatile together and separately, buttressing our conclusions about the intrapersonal links between race categories and sexual role preferences.

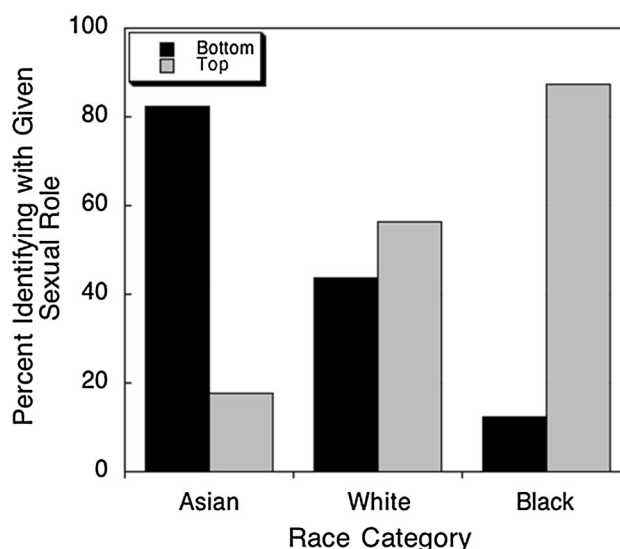


Fig. 5 Percentage of participants identifying with each sexual role as a function of race category in Study 3

expected, the proportion of self-identified tops and bottoms varied significantly across race categories, $\chi^2(2) = 59.23, p < .001$. Among Asian men, 82.4% listed bottom as their preferred sexual role and 17.6% listed top as their preferred sexual role. Among White men, 43.8% listed bottom as their preferred sexual role and 56.2% listed top as their preferred sexual role. Among Black men, 12.5% listed bottom as their preferred sexual role and 87.5% listed top as their preferred sexual role. Thus, we observed a strong tendency for Asian men to identify as bottoms and for Black men to identify as tops; White men were intermediate in their descriptions of their preferred sexual roles (Fig. 5).

As a more stringent test of our hypotheses, we used generalized estimating equations to account for the fact that our data were nested within 10 cities. Upon regressing preferred sexual role ($0 = \text{bottom}$, $1 = \text{top}$) onto race ($0 = \text{Asian}$, $1 = \text{White}$, $2 = \text{Black}$), we found that the proportion of tops and bottoms varied significantly across race categories, $\chi^2(2) = 8.56, p = .01$. The odds of a White man identifying as a top were nearly six times higher than the odds of an Asian man identifying as a top, $B = 1.78, SE = 0.29, z = 6.18, p < .001, OR = 5.93$. The odds of a Black man identifying as a top were nearly six times higher than the odds of a White man identifying as a top, $B = 1.76, SE = 0.38, z = 4.67, p < .001, OR = 5.81$. Finally, the odds of a Black man identifying as a top were more than 34 times higher than the odds of an Asian man identifying as a top, $B = 3.54, SE = 0.40, z = 8.76, p < .001, OR = 34.47$. These findings indicate that Black men were most likely to identify as tops, followed by White men and then Asian men.

Thus, Study 3 revealed that Asian men tended to publicly self-identify as bottoms whereas Black men tended to self-identify as tops on a public hookup website. While we cannot determine whether these tendencies reflect innate preferences or the internalization of stereotypes uncovered in Studies 1 and 2, the findings provide clear evidence of race-based positioning

in gay men's reports of their own sexual preferences. That is, gay men's self-reported sexual role preferences varied along racial lines that matched the cultural and interpersonal belief systems described in Studies 1 and 2.

General Discussion

Sexual role preferences (i.e., top/bottom) are an important aspect of gay male identity, as they are imbued with information about behavioral tendencies, physical appearances, and personality traits. The studies reported here add to the small but growing literature on this topic by demonstrating that sexual role preferences intersect with race categories in distinctly gendered ways. In particular, we found that cultural stereotypes, interpersonal perceptions, and individual self-labels coalesce to characterize Asian men as feminine bottoms and Black men as masculine tops. White men were intermediate, being consistently linked to neither the bottom nor the top label. This does not necessarily mean that White men were considered versatile; instead, White men appeared to be more evenly spread across the top and bottom roles than were Black and Asian men.

This pattern of effects replicated across three different levels of analysis. Study 1 revealed that gay men endorsed similarly feminine stereotypes about the categories Asian and bottom, and similarly masculine stereotypes about the categories Black and top. Study 2 revealed that these belief systems guided judgments of other men's preferred sexual roles at zero acquaintance, such that perceivers were prone to label Asian men as bottoms and Black men as tops because of their relatively feminine and masculine facial appearances, respectively. These findings suggest that the gendered overlap between race categories and sexual roles helps to drive gay men's understandings of others' sexual role preferences. Such perceptions have important consequences insofar as they may predict actual sexual behaviors. Indeed, previous research suggested that gay men often accept the sexual role that is expected of them by their partner (Hoppe, 2011). This is not to say that men's personal preferences play no role in their behavior; they certainly do. But in addition to pre-existing preferences, we suggest that interpersonal heuristics may influence self-perceptions and perhaps even guide sexual behavior.

Study 3 added further weight to these findings by revealing that racial minority individuals tend to self-identify with specific sexual roles: Black men overwhelmingly labeled themselves as tops and Asian men overwhelmingly labeled themselves as bottoms on a public hookup website. One explanation for these preferences is that they reflect innate differences in gendered behaviors and sexual preferences across racial groups. Another explanation is that these preferences reflect the internalization of cultural stereotypes. There is at least some limited evidence to support the latter possibility. For example, research in social psychology has documented powerful effects of stereotypes on human behavior and self-identification (Chen & Bargh, 1997;

Galinsky et al., 2013; Kelly & Floyd, 2001; Skrypnik & Snyder, 1982). Moreover, several recent studies documented that some gay men feel pressure to fulfill stereotypes associated with their racial group (Han, 2006; Phua, 2007). Coupled with the current findings, this work raises the possibility that stereotypes and perceptual biases may lead Asian men to align themselves with the bottom role and Black men to align themselves with the top role. Of course, existing data are far from definitive on this issue. Longitudinal work or experimental studies that manipulate the salience of racial group stereotypes and test their impact on self-reported sexual roles will be necessary to determine the causal underpinnings of these trends.

Taken together, our findings offer several theoretical insights. First, recent qualitative studies have suggested that gay men's sexual role preferences may be distinctly racialized (Han, 2006; Wilson et al., 2009), but quantitative studies have been lacking. Our work begins to fill this gap, demonstrating statistically reliable links between the categories Black/top and the categories Asian/bottom. Second, a growing number of studies have explicated the gendered nature of race stereotypes (Goff et al., 2008; Johnson et al., 2012), and at least one series of studies applied these findings to relationship outcomes among racial minorities (Galinsky et al., 2013). Our study replicated these findings and extended them to the gay community, demonstrating that overlapping beliefs about racial groups and gendered features were manifest in gay men's perception of and identification with certain sexual roles. Third, a robust literature has demonstrated that perceivers rely on facial cues to assign individuals to perceptually ambiguous social categories (Carpinella & Johnson, 2013; Freeman, Johnson, Ambady, & Rule, 2010; Johnson & Ghavami, 2011; Rule & Ambady, 2008; for a review, see Tskhay & Rule, 2013b). Our studies contribute to this literature by demonstrating that gay men rely on gender and race phenotypes to label others as tops or bottoms. Collectively, these insights provide theoretical advances across disciplines within the social sciences.

Aside from its theoretical implications, research on this topic is also important because differences in sexual behavior across racial groups can have serious health consequences. Indeed, health risks are unequally distributed across sexual roles, such that bottoms are more likely to contract HIV during unprotected anal sex than are tops (Moskowitz et al., 2008; Wegesin & Meyer-Bahlburg, 2000). Thus, the fact that gay Asian men are expected to act in a feminine manner and that they tend to identify themselves as bottoms may put them at heightened risk for disease. Consistent with this possibility, several recent studies have highlighted potentially heightened disease risk among Asian men. For example, unrecognized HIV infection is more than twice as common among men who identify as bottoms than among men who identify as tops, and bottom is the sexual role most frequently endorsed by Asian men (Wei & Raymond, 2011). Furthermore, Asian gay men who encounter discrimination related to stereotypes that Asians are passive and feminine are most likely to report engaging in risky sexual behavior (Wilson & Yoshikawa, 2004). Finally, public health data

indicate that unprotected anal intercourse may be more common among Asians than among any other group of men who have sex with men (Choi, Han, Hudes, & Kegeles, 2002; Lye Chng & Geliga-Vargas, 2000). While we are not aware of recent statistics indicating higher rates of HIV diagnosis among Asian men relative to other racial groups, these findings highlight a potentially increased risk of HIV for this group. Continued research on the interpersonal and intrapersonal processes leading to these risky sexual decisions may therefore have important public health implications.

In conclusion, gay men endorse distinctly gendered stereotypes of both racial categories and sexual roles that link Black men to the category top and Asian men to the category bottom. These stereotypes are present not only in general belief systems, but also in interpersonal and intrapersonal labeling processes. As such, intersecting race and gender identities are critical to our understanding of sexual role preferences and their perceptions among gay men.

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