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## The Influence of Physical Body Traits and Masculinity on Anal Sex Roles in Gay and Bisexual Men

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## Abstract

Sociological, psychological, and public health studies document that many gay and bisexual men may self-label by their anal penetrative role (i.e., bottom or exclusively receptive; top or exclusively insertive; or versatile, both receptive and insertive during anal intercourse). Yet, what orients men to think of themselves as tops, bottoms or versatiles is poorly understood. We surveyed 429 men engaging in same-sex anal intercourse to investigate the degree to which anal penetrative self-identity was concordant with actual penetrative behavior. Additionally, the roles of masculinity and physical body traits (e.g., penis size, muscularity, height, hairiness, and weight) were tested as correlates of anal penetrative identity and identity-behavior concordance. Tops and bottoms showed a high degree of concordance between identity and enacted behavior; however, only half of versatiles reported concordant identity and behavior (i.e., wanting to be versatile and actually reporting versatile behavior). Generally, tops reported larger penises than bottoms. They also reported being comparatively more masculine than bottoms. Versatiles fell somewhat between the tops and bottoms on these traits. Of the six independent variables, penis size and masculinity were the only two factors to influence concordance or discordance between identity and penetrative behavior. Our study suggests that the correlates of gay men's sexual self-labels may depend on objective traits in addition to the subjective pleasure associated with receptive or insertive anal intercourse.

## Keywords

Anal Penetrative Role; Tops; Bottoms; Versatiles; Penis Size; Masculinity; Gay and Bisexual Men

## INTRODUCTION

Male and female penetrative roles during heterosexual sexual intercourse are theorized to have developed evolutionarily to facilitate human reproduction (Symons, 1981). Roles are usually immutable, well defined, and correlated with physiological and psychological expressions of gender (Campbell, 1995). Much less is known regarding penetrative roles during same-sex sexual intercourse (Hart, Wolitski, Purcell, Gómez, & Halkitis, 2003;

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Moskowitz, Rieger, & Roloff, 2008), particularly given men have the physiological capacity to both penetrate and be penetrated (through anal intercourse), and lack the ability to reproduce from the sexual act. Although it is obvious why heterosexual men are insertive during sexual intercourse and heterosexual women are receptive, it is still unknown why men engaging in same-sex sex may tend towards being exclusively insertive, exclusively receptive, or both insertive and receptive during anal intercourse.

Scant research exists regarding male same-sex anal penetrative roles. Sociological, psychological, and public health studies document that many gay and bisexual men may self-identify by their penetrative role (Carrier, 1977; Gil, 2007; Hart et al., 2003; Moskowitz et al., 2008; Sanderson, 1994; Wegesin & Meyer-Bahlburg, 2000; Wei & Raymond, 2010). These self-identifications have been called sexual self-labels (Hart et al., 2003). Men who prefer to be exclusively receptive during anal intercourse self-identify as "bottoms," men who prefer to be exclusively insertive during intercourse self-identify as "tops," and men without preferences for either role during anal intercourse self-identify as "tops," and men and intercourse (Moskowitz et al., 2008). Sexual self-labels may also refer to preferences during other types of sexual activities. Tops have been found to be generally insertive, bottoms to be generally receptive, and versatiles to be amenable to either role regarding a multitude of sexual behaviors besides anal intercourse. These behaviors, among others, included oral intercourse, fisting, the use of sex toys, and urination on a partner as a sexual act (Hart et al., 2003; Moskowitz et al., 2008).

Yet, what orients men to think of themselves as tops, bottoms or versatiles is poorly understood and usually reliant on non-scientific, anecdotal evidence. Regarding scientific evidence, dominance and submissiveness (i.e., power) have been suggested as potential correlates of penetrative roles. Some researchers have found that tops report being more dominant and bottoms as more submissive (Bailey, Kim, Hills, & Linsenmeier, 1997; Carballo-Diéguez et al., 2004; Gil, 2007; Moskowitz et al., 2008). Yet others (e.g., Kippax and Smith, 2001) argue that such assertions may be inconsistent and rely almost entirely on the dynamics between sexual partners.

Gender roles also may be predictive of sexual self-labels. Previous research has examined potential differences in degree of masculinity between tops and bottoms yielding inconsistent results. Early research by Weinrich et al. (1992) found no significant association between insertive anal intercourse and masculine roles but found receptive anal intercourse to be somewhat associated with feminine roles. Bailey et al. (1997) found significant associations between the label "top" and masculine descriptors and the label "bottom" and feminine descriptors. Evidence from this study was indirectly collected from personal advertisements. Carballo-Diéguez et al. (2004) found that, in Latin American cultures, bottoms are perceived as "feminine" and tops are perceived as "masculine." Regardless of such inconsistent findings and differing methodologies, none of these studies measured *comparative* masculinity (i.e., self-ratings of masculinity where men compare themselves to other men regarding the trait). Thus, more research is warranted on the influence of masculinity in male anal penetration.

No research has explicitly explored the influence of physical body attributes on penetrative orientation. Physical body attributes have been associated with sexual behavior and psychology in gay and bisexual men. For example, such men have reported having larger penises than heterosexual men (Bogaert & Hershberger, 1999). Grov, Parsons, and Bimbi (2010) found psychosocial adjustment reported by gay and bisexual men to be positively associated with penis size. Thus, such traits (penis size, height, muscularity, weight, and hairiness) also might be important contributors to whether one self-identifies as a top, bottom or versatile. Gay and bisexual men have been documented as valuing and even coveting such characteristics, in particular muscularity, larger erect penises, and litheness (Filiault & Drummond, 2007). Research also shows gay men have deference for partners with such characteristics (Moskowitz, Rieger, & Seal, 2009). Furthermore, in a qualitative study of gay men, Drummond and Filiault (2007) found that smaller penis sizes were associated with sexual dissatisfaction because they were "boring" and could not be "felt." Such evidence might suggest that bottoms may be receptive as a function of their penis sizes. That is, they may not be given the opportunity to top because they will not be "felt;" or, they may feel too insecure to top due to reported or perceived previous sexual dissatisfaction attributable to not being "felt." Additionally, if masculinity and dominance were indeed associated with penetrative roles as previously suggested (Bailey et al., 1997; Carballo-Diéguez et al., 2004; Gil, 2007; Moskowitz et al., 2008), indicators of increased physical masculinity (muscularity, height, weight, and hairiness; Puts, 2010) might be associated with orienting towards insertive behavior only.

As noted, male same-sex anal penetrative roles are substantially more mutable than heterosexual penetrative roles. This is a direct result of the versatility implicit in having both a penis and anal cavity. Previous studies have documented the proportion of tops, versatiles, and bottoms in populations of gay and bisexual men (e.g., Hart et al., 2003; Moskowitz et al., 2008). However, only one study accounted for men's ideal penetrative role relative to their most commonly enacted role (Wei & Raymond, 2010). Men can self-present as one ideal label (e.g., "In a perfect world, I'm a top") but can actually and commonly behave either concordantly or discordantly with that original ideal self-presentation (e.g., "But I usually end-up bottoming"). Wei and Raymond measured the alignment between ideal and commonly enacted penetrative role, concluding that "...men who preferred being 'bottom' also sometimes took the insertive role and those who preferred being 'top' also sometimes took the receptive role." To expand and account for these findings, we posit that masculine body characteristics and masculinity itself may be associated with discordant ideal and commonly enacted anal penetrative roles, particularly in versatile men. Men partner to have sex, where having more or fewer desirable traits might trigger more or fewer enacted insertive or receptive intercourse instances, independent of ideal role. That is, though the preference may be to penetrate or be penetrated, the presence or absence of a large penis, muscularity, and/or masculinity might ultimately decide actual penetrative role.

#### **Hypotheses**

Hypothesis 1: Men who are ideally tops will report having more masculine physical body traits and comparative masculinity than men who are ideally

bottoms. Ideally versatile men will report physical body traits and masculinity at lower degrees than ideally tops but at higher degrees than ideally bottoms.

Hypothesis 2: Men who commonly enact the top role will report more masculine physical body traits and masculinity than men who commonly enact the bottom sexual role. Men who commonly enact the versatile role will report physical body traits and masculinity at lower degrees than men who commonly enact the top sexual role but at higher degrees than men who commonly enact the bottom sexual role.

Hypothesis 3: Physical body traits and masculinity will be responsible for potential discordant relationships between ideal and commonly enacted sexual role in men, where higher degrees of the traits will predict *actual* insertive behavior and lower degrees of the traits will predict *actual* receptive behavior.

## METHOD

#### Participants and Procedure

Over March and April of 2008, gay and bisexual men placing sexual advertisements on Craigslist.org sites were asked to take a brief online survey. We uniformly emailed the first 100 men's ads on every Craigslist.org city site in which English was the predominantly language. Thousands of men were emailed. The exact response rate was impossible to calculate given the degree to which spam filters may have deleted the solicitation. However, it was most likely low. Specifically, we responded to each man's sexual advertisement with a block message informing him of a research study on the attitudes and sexual behaviors of men who have sex with men. A link embedded in the email took them directly to the survey. The first page of the online survey acted as a consent form. Participants could not advance to the actual survey without clicking a box to consent. Participants were not compensated for their time. After excluding men who reported not having anal sex (n = 135), we used the remaining sample of 429 men who completed the survey for the analyses.

#### Measures

**Penetrative Roles**—We assessed anal penetrative role by ideal role and most commonly enacted penetrative role. First, we defined each sort of penetrative role: bottom, versatile, and top. Then, for ideal role we asked, "In a perfect world, if it were only up to you, which role would you consistently play?" Following, participants were asked, "IN REALITY, with actual partners, which role do you consistently play?" For both questions, individuals could select, "bottom," "versatile," "top," or "I do not have anal sex/do not have anal sex consistently enough to answer this question." Men selecting the last category were not included in the study and their data are not reported.

**Masculinity**—Masculinity and femininity were measured as two separate items. Participants rated themselves against other men (i.e., "compared to most men") using a femininity scale and masculinity scale (e.g., 1 = not at all feminine, 7 = extremely feminine; 1 = not at all masculine, 7 = extremely masculine; Rieger, Linsenmeier, Gygax, & Bailey,

2008). Femininity was reverse-coded and then summed with masculinity. The scale had acceptable reliability ( $\alpha = .73$ ).

**Physical Body Traits**—We asked the men to rate themselves, *compared to most men*, on a 7-point scale on the following body attributes: height, weight, body hairiness, muscularity, and erect penis size (1 = low, 4 = average, 7 = high). For example, individuals who rated themselves as "1" on body hairiness rated themselves as being hairless, while individuals who rated themselves as "7" rated themselves as being extremely hairy. These measures were previously published in a study on narcissism and partner selection among gay and bisexual men (Moskowitz et al., 2009).

#### Statistical Analyses

We used SPSS versions 17.0 for Windows. The data were analyzed using cross tabulation (with  $\chi^2$  statistics) and multivariable multinomial logistical regression. This sort of regression allows for the groups to be compared with each other using a rotating referent group. For example, all groups can be compared to ideally versatile men regarding the independent variables. Then, all groups can be compared to men who ideally bottom regarding the independent variables. Each unique group gets a rotation (an opportunity) to be the comparison group.

The dependent variables were all nominal. These variables were ideal penetrative role, commonly enacted penetrative role, and ideal versus commonly enacted penetrative role. Dummy codes were assigned to all the different attributes within each variable. We report the odds ratios, the 95% confidence intervals, and the statistical significance of the tests for group comparisons. For all multinomial logistical regression models, all independent variables (i.e., masculinity and all body characteristics) were entered simultaneously to examine contributions of unique variance. The more conservative, McFadden pseudo- $R^2$  was used to signify the effect sizes for the overall nominal regression models (Veall & Zimmermann, 1996).

## RESULTS

#### Sample

As shown in Table 1, the sample was largely White and showed a fairly normal distribution on education. Most men were between 30 and 50 years old. Many of the men came from small- to medium-sized towns (44.3% from areas populated with under 100,000 people). None of the demographic variables (including age) were associated with the independent variables or the dependent variables. The men reported being above average on masculinity. In addition, they rated themselves above average on height, weight, and penis size, but below average on muscularity and hairiness. As suggested by previous studies (e.g., Puts, 2010) and noted in Table 1, masculinity was related to hairiness, muscularity, and penis size.

#### Ideal versus Commonly Enacted Penetrative Role

Table 2 shows the men's ideal penetrative role compared with their commonly enacted penetrative role. There were differences in the distribution of ideal and commonly enacted

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penetrative role,  $\chi^2(4, N=425) = 251.23$ ,  $\Phi^2 = .59$ , p < .001. Though there was excellent agreement between ideal and commonly enacted bottoms (78.4%) and ideal and commonly enacted tops (81.0%), versatiles showed far more discrepancy between their ideal orientation and commonly enacted orientations (51.0% discrepancy rate). Such discrepant versatiles reported a commonly enacted role of bottom in 48% of cases and top in 52% of cases. Only 2% of bottoms reported antithetical behavior (i.e., in reality, being tops). No tops (0.0%) reported antithetical behavior (i.e., in reality, being bottoms).

#### Associations between Body Traits, Ideal, and Commonly Enacted Penetrative Role

We conducted two multivariable multinomial logistical regression models treating the ideal and commonly enacted penetrative roles as separate dependent variables. For masculinity and the body characteristics predicting ideal roles, the model was significant,  $\chi^2(12) =$ 35.86,  $R^2 = .04$ , p < .001. Specifically, ideally bottoms were less likely to be masculine (*OR* = 0.79, 95% *CI* = 0.69–0.90, p < .001) and less likely to have larger erect penises (*OR* = 0.59, 95% *CI* = 0.43–0.82, p < .001) compared with ideally tops. Similarly, ideally bottoms were less likely to be masculine (*OR* = 0.85, 95% *CI* = 0.77–0.95, p < .01) and less likely to have larger erect penises (*OR* = 0.69, 95% *CI* = 0.53–0.91, p < .01) compared with ideally versatiles. Ideally versatiles were less likely to be hairy compared with tops (*OR* = 0.81, 95% *CI* = 0.67–0.98, p = .02).

For masculinity and the body characteristics predicting commonly enacted roles, the model was significant,  $\chi^2(12) = 50.66$ ,  $R^2 = .06$ , p < .001. Specifically, commonly enacted bottoms were less likely to be masculine (OR = 0.79, 95% CI = 0.70-0.89, p < .001) and less likely to have larger erect penises (OR = 0.52, 95% CI = 0.39-0.71, p < .001) compared with commonly enacted tops. Similarly, commonly enacted bottoms were less likely to be masculine (OR = 0.90, 95% CI = 0.80-0.99, p = .05) and less likely to have larger erect penises (OR = 0.66, 95% CI = 0.49-0.88, p < .01) compared with commonly enacted versatiles. Commonly enacted versatiles were less likely to be masculine compared with commonly enacted tops (OR = 0.89, 95% CI = 0.79-0.99, p = .05).

#### Associations between Discordant and Concordant Ideal and Real Penetrative Roles

A final multivariable multinomial logistical regression was conducted to assess comparative differences in the attributes between discordant and concordant ideal and commonly enacted penetrative roles. Due to small cell sizes, ideally bottoms that commonly enacted the top role (1.6%) and ideally tops that commonly enacted the bottom role (0.0%) were omitted from the analyses. The model was significant,  $\chi^2(36) = 67.86$ ,  $R^2 = .05$ , p < .01. Echoing previous findings, penis size and masculinity were the most influential over the differentiation between concordant versatiles and concordant tops from concordant bottoms. Specifically, concordant tops were more like to have larger erect penises (OR = 2.05, 95% CI = 1.42-2.98, p < .01), and more likely to be more masculine (OR = 1.30, 95% CI = 1.11-1.51, p < .01) than concordant bottoms. Concordant versatiles were more likely to have larger erect penises (OR = 1.69, 95% CI = 1.20-2.40, p < .01), and more like to be masculine (OR = 1.17, 95% CI = 1.02-1.33, p = .05) than concordant bottoms.

Significant differences were found between two of the four discordant groups when compared to each other and to the additional three concordant groups. These groups were the ideally versatile men who commonly enact the bottom role and the ideally versatile men who commonly enact the top role. Men who were ideally versatile but who commonly enacted the bottom role did not vary from concordant bottoms; however, such men were less likely to have larger penises when compared with concordant versatiles (OR = 0.66, 95% CI = 0.43-0.98, p = .05) and tops (OR = 0.54, 95% CI = 0.72-0.83, p < .01). Furthermore, such men also were less likely to have larger penises when compared with men who were ideally versatile but who commonly enacted the top role (OR = 0.56, 95% CI = 0.36-0.90, p = .05).

Men who were ideally versatile but who commonly enacted the top role did not vary by penis size from concordant versatiles and concordant tops, but were more likely to have larger penises than concordant bottoms (OR = 1.96, 95% CI = 1.30-2.95, p < .01). Such discordant men were no more likely than concordant versatiles and concordant tops to be masculine, but were more likely to be masculine relative to concordant bottoms (OR = 1.33, 95% CI = 1.12-1.57, p < .01). Regarding comparisons between discordant groups (and as noted in the previous paragraph), such men were more likely to have larger erect penises relative to men who were ideally versatile but who commonly enacted the bottom role. No other significant results emerged between the different concordant groups, discordant groups, and the other body characteristics (i.e., height, body weight, hairiness, and muscularity).

#### DISCUSSION

Penis size and masculinity proved to be the two most consistent statistically significant variables with respect to predicting ideal and commonly enacted anal penetrative role. The other body characteristics (e.g., weight, height) were not significantly associated with any role; hairiness only was different between ideally versatiles and ideally tops. With respect to differences between concordant and discordant ideal and commonly enacted roles, penis size and masculinity also were the two most predictive factors. Concordant bottoms had comparatively smaller penises and were less masculine than both concordant versatiles and concordant tops. More importantly, penis size was the decisive variable splitting the relationship between ideal and commonly enacted role among versatiles. Simply, for some men, having smaller or larger penises seemed to ultimately guide the actual enactment of penetrative role and not its mere intention. This finding may suggest that objective comparisons between the self and one's partner (i.e., my penis is bigger than his) and not phenomenological influences (as suggested by Kippax & Smith, 2001), may influence anal penetrative behavior with casual sexual partners.

As stated, few of the other body characteristic variables predicted differences between the groups. One potential reason for this was the high degree of relatedness between masculinity and these variables (see Table 1). Suggested by previous research (Puts, 2010), masculinity may have become a proxy measure for characteristics like muscularity and hairiness. That is, men who were hairy and/or muscular self-identified as comparatively more masculine. As for height and weight, there was a high degree of relatedness between these variables and

erect penis size (see Table 1). Penis size may have accounted for the variance that would have been contributed by these variables.

Erect penis size may represent the degree of conquest a top can inflict. It may represent a sense of accomplishment the receptive partner might receive from anal intercourse (Drummond & Filiault, 2007). Masculinity might represent dominance and manliness in oneself and in partners. These are attractive characteristics, which are frequently revered and shown deference by gay men (Filiault & Drummond, 2007). As such, it is not surprising that men without these characteristics would potentially defer to those with them to secure a more pleasurable and satisfying sexual experience (i.e., be an exclusive bottom). Alternatively, individuals with these characteristics would either self-select or—for those ideally versatile men, who commonly top—have no choice but to enact the insertive penetrative role. Men who ideally would like to be versatile may find their comparatively smaller penises make even intermittent insertive intercourse unlikely with casual partners. Our study suggests that the determinants of men's actions regarding same-sex sexual encounters may depend on how well or poorly they conform to what is objectively attractive and valued in a casual sexual partner. Those with bigger penises penetrate. Those with smaller penises get penetrated.

Concordant bottoms and tops and discordant versatiles follow this paradigm. Concordant versatiles remain a relative mystery. Theoretically, concordant versatiles should have fallen somewhere in between concordant bottoms and concordant tops on the two salient variables. Indeed, results indicated that this group actually reported comparatively larger penises and were more masculine than concordant bottoms. However, no significant differences emerged between concordant versatiles and concordant tops. If penis size and masculinity poorly differentiate these two groups, what ultimately contributes to individual differentiations between concordant versatiles and tops? More research is needed, particularly regarding the degree to which individuals find pleasure in the specific acts of receptive and insertive anal intercourse as behaviors.

#### Limitations

The current study had several limitations that should be noted. The measures of body characteristics and masculinity relied on single items to capture the data. All of the data were self-reported; no objective, physical measurements were made by a third-party. As a result, the men may have inflated their answers regarding certain body attributes (e.g., exaggerated penis size, muscularity, or masculinity). As for the self-labels, the men were asked to identify as either a top, versatile or a bottom; however, there were no behavioral measures concerning the degree to which they enacted the associated behaviors. Men who self-identified as tops and only had one or two sexual partners were treated the same as men who had 50 partners. The use of the word "consistently" may have introduced unwanted subjectivity into responses. "Consistently" may have represented differing degrees of role adherence to different men. As a result, the high degree of discrepancy among versatiles might have been an artifact of using this word in the measures. We did not distinguish between men in relationships and men who were single. Relationship status, development, or expectations may play some influence over anal penetrative role (Moskowitz et al., 2008).

Finally, it should be noted that though the models were statistically significant, they did not produce large effect sizes ( $R^2 < .10$ ). In other words, there may be a number of unmeasured variables that future researchers might want to include to increase the robustness of such models (e.g., subjective pleasure, sexual expectancies, performance efficacy).

#### **Future Directions**

This study was the first to use body attributes to explain differences among tops, versatiles, and bottoms. It only was the second to assess the alignment between ideal and commonly enacted anal penetrative role among men engaging in same-sex sexual encounters. With such a paucity of research, little is known regarding the reasons for differentiation in roles among gay and bisexual men, which leaves myriad directions for future research. It is still unclear why some men are concordant versatiles rather than concordant tops. No substantial differences were found between these groups in this study. What makes some men tend towards receptive anal intercourse and become versatile, while others unilaterally reject it and become tops? There may be key variables missing from our study that might account for these variations. Future studies might assess differences in perceived physiological discomfort (i.e., pleasure) during receptive anal intercourse (see Carballo-Diéguez et al., 2004) might be a factor that contributes to the differentiation between concordant versatiles and tops.

More fundamentally, future research should account for what contributes to the formation of any orientation as ideal. Are penetrative role orientations inevitable, as a result of aspects such as penis size? Are they potentially linked to androgen levels, susceptible to variations in hormones like testosterone? There is some evidence in our study to suggest this. Increased psychological and social expressions of masculinity are associated with increased levels of androgens (Knussmann & Sperwien, 1988). Thus, the biology behind the differences in masculinity self-reported by the men (e.g., concordant tops relative to concordant bottoms) may be contributing to their role formation. Endocrinological measures might benefit any future investigations into top, versatile, or bottom orientations.

Finally, explicit partner selection was not incorporated into the analyses of this study. The men sampled only reported self-characteristics and not characteristics they sought in a partner. Future studies might assess whether bottoms engaging in anal intercourse ideally want partners with big penises or who are comparatively more masculine than themselves; if versatiles are looking for partners who are comparatively similar; and if tops want partners who have comparatively smaller penises and are less masculine. In short, sexual partner attraction might be a function of expected penetrative role.

As indicated, too little is known regarding male anal intercourse penetrative role. Significantly more research is warranted into the reasons for male adoption of the top, bottom, or versatile self-label. Given the extreme degree to which bottoms and tops seem to assume their identity and follow through with behavior, such orientations may be more inevitable than chosen. For in the final analysis, understanding such roles even may offer insight into the origins of gay male sexual orientation itself.

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Description of the sample

	2	V 10 %	М	SD	Range
Age			40.88	12.03	18–79
Population size of current town or city (in numbers of people)					
< 10K	38	8.9			
10K - 50K	LL	17.9			
51K – 100K	75	17.5			
101 - 500K	90	21.0			
501 - 1000K	59	13.8			
1000K +	90	21.0			
Race/Ethnicity					
White	368	85.8			
Black	18	4.2			
Latino	26	6.1			
A sian/Pacific Islander	9	1.4			
Middle Eastern	7	0.5			
Other	6	2.0			
Education					
Some high school/finished high school	46	10.7			
Some undergraduate	142	33.1			
Finished undergraduate	120	28.0			
Some graduate	37	8.6			
Finished graduate	84	19.6			
			Μ	SD	Range
Comparative masculinity			10.62	2.28	4–14
Comparative body traits					
Height			4.51	1.05	1 - 7
Weight			4.26	1.01	$1^{-7}$
Hairiness			3.85	1.43	1 - 7

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Note. N = 429. For the body morphology attributes, lower scores meant less of the body attribute and higher scores meant more of the body attribute (4 = average). Masculinity was positively related to hairiness (r = .15, p < .01) and muscularity (r = .25, p < .001). Penis size was positively related to height (r = .20, p < .001) and megatively related to weight (r = .23, p < .001).

1 - 7

0.97

4.54

Erect penis size

#### Table 2

## Ideal by real penetrative role

	In reality, a bottom	In reality, versatile	In reality, a top
Ideally a bottom ( <i>n</i> )	98	25	2
% within row	78.4	20.0	1.6
% within column	66.2	17.4	1.5
Ideally versatile (n)	50	100	54
% within row	24.5	49.0	26.5
% within column	11.7	23.3	12.6
Ideally a top ( <i>n</i> )	0	19	81
% within row	0.0	19.0	81.0
% within column	0.0	13.2	59.1