

Overdoing Gender: A Test of the Masculine Overcompensation Thesis¹

Robb Willer

University of California, Berkeley

Bridget Conlon

California State University, Fresno

Christabel L. Rogalin

Purdue University, North Central

Michael T. Wojnowicz

University of Washington

The masculine overcompensation thesis asserts that men react to masculinity threats with extreme demonstrations of masculinity, a proposition tested here across four studies. In study 1, men and women were randomly given feedback suggesting they were either masculine or feminine. Women showed no effects when told they were masculine; however, men given feedback suggesting they were feminine expressed more support for war, homophobic attitudes, and interest in purchasing an SUV. Study 2 found that threatened men expressed greater support for, and desire to advance in, dominance hierarchies. Study 3 showed in a large-scale survey on a diverse sample that men who reported that social changes threatened the status of men also reported more homophobic and prodominance attitudes, support for war, and belief in male superiority. Finally, study 4 found that higher testosterone men showed stronger reactions to masculinity threats than those lower in testosterone. Together, these results support the masculine overcompensation thesis, show how it can shape political and cultural attitudes, and identify a hormonal factor influencing the effect.

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PRESENT RESEARCH

The above-reviewed theory and research suggests the plausibility of our central claim. On the one hand, masculinity theorists argue that masculinity

is both narrowly defined and highly socially valued, making men relatively more likely to perceive threats to their masculinity and more motivated to respond to them. Theories of identity explain how individuals strive to maintain deeply held and socially valued identities like masculinity, positing that such identities are maintained via an overcompensation dynamic in which individuals respond to threats with extreme forms of identity-consistent attitudes and behavior. Finally, research has linked testosterone levels with responsiveness to threats and the enactment of masculine traits like dominance, though it remains an open question whether testosterone levels might mediate or moderate the masculine overcompensation dynamic.

Based on the above, we hypothesize that men will react to masculinity threats with extreme demonstrations of masculinity but that women will be far less affected by corresponding threats to their femininity. We test this claim across a series of studies. Study 1 is a laboratory experiment in which we tested whether men whose masculinity was threatened would adopt more masculine attitudes. In study 2 we conducted another laboratory experiment in an effort to identify what aspect of masculinity men enact through overcompensation. Study 3 tests the masculine overcompensation thesis in a more diverse sample, using a national survey to examine whether men who report greater feelings that social changes threaten the status of men also tend to espouse more masculine attitudes. In each of these studies, we also test for possible effects for women. Finally, in study 4 we returned to a laboratory setting to explore the possible mediating or moderating role that men's testosterone levels might play in the overcompensation process.

STUDY 1: AN EXPERIMENTAL TEST

We conducted a laboratory experiment as an initial test of the masculine overcompensation thesis. In the study we administered a gender identity survey to men and women and then gave them randomly determined feedback indicating that they had scored in either the "masculine" or "feminine" range relative to past study participants. We then looked at how this feedback might affect their responses on subsequent surveys. Specifically we measured participants' support for the Iraq War, views of homosexuality, and interest in purchasing a sport utility vehicle (SUV), all views that were considered masculine in the study population.² Based on the above theoret-

² Past theory and research have linked masculinity with support for war (Connell 1985; Christensen and Ferree 2008; Messerschmidt 2010), homophobia (Kimmel 1994), and SUV ownership (Bradsher 2002). Conceptions of masculinity, however, vary across

ical reasoning, we expect men whose masculinity is threatened to express more support for the Iraq War, more negative views of homosexuality, and more interest in buying an SUV. While we predict effects of masculinity threats but weak or no effects for femininity threats among women, we include women in our study to establish that our predicted effects are in fact unique to men. That said, because the dependent measures we employ are selected to capture masculine attitudes, this study offers limited insight on whether and when women would exhibit overcompensation.

Method

Design and Participants.—The study features a $2(\text{participants were men/women}) \times 2(\text{participants' gender identity was threatened/not})$ experimental design. One hundred and eleven undergraduate students (60 women, 51 men) at Cornell University participated in the study for pay plus the option of extra credit in a sociology class. One participant was excluded from analysis because he reported suspicion regarding the gender identity feedback.

Procedure.—Participants were recruited by fliers advertising payment for participation in a sociology experiment or by announcements in their undergraduate sociology class. After reporting to the lab, participants filled out a demographic questionnaire and a “gender identity survey,” the text of which is given in the appendix. The gender identity survey was the Bem Sex Role Inventory, a battery that asks respondents to indicate how well a series of adjectives (e.g., competitive, soft-spoken) describes their personality (Bem 1974). After this the participants were asked to wait several minutes while the research assistant ostensibly scored the survey. Participants were given results on their gender identity in a sealed envelope with their name printed on it. Envelopes were filled with feedback sheets prior to the session and sealed so that research assistants would be unaware of the experimental condition.

Feedback sheets displayed a 0–50 scale of possible scores on the gender identity survey, as shown in figure 1. The range from 0 to 25 was the masculine half of the scale and from 26 to 50 the feminine half. In the middle of each range, brackets indicated the “average male range” and “average female range” for scores in the study. In actuality, the average ranges given

groups (Connell and Messerschmidt 2005), thus we conducted a pretest ($N=60$) in a separate sample to assess whether these dependent variables were viewed as masculine among members of the population. Participants rated Iraq War support, negative views of homosexuality, and SUV ownership to be more masculine than they were feminine (P 's $< .001$) and more masculine than opposing war, having positive views of homosexuality, or owning one of the other three vehicles tested (P 's $< .05$).

Gender Identity Survey Feedback

The following is your score on the gender identity survey. It has been placed on a 0 to 50 index running from "Masculine" to "Feminine." Those lower on the scale have more masculine gender identities, those higher on the scale have more feminine gender identities.

Your Score: _____

Below is a line graph of average score for men and women on the Gender Identity Survey. We have indicated your score with an "X" on the line.

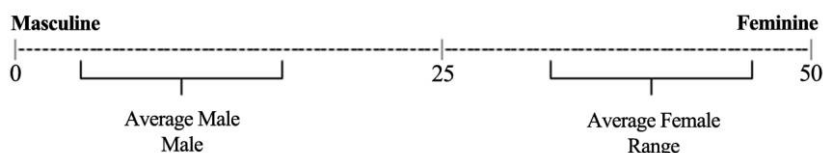


FIG. 1.—Format for gender identity feedback provided to participants

on the feedback sheets, as well as the participants' scores, were false and created purely for the purposes of manipulating gender identity feedback.³

Men and women in the study were randomly assigned to receive either masculine or feminine feedback. Half of men were told they scored an "11" on the gender identity survey, a score corresponding to the middle of the masculine distribution noted on the feedback sheets, while the other half were given a score of "32," just inside the feminine range of the scale. Half of the women in the study were told that they scored a "39" on the gender identity survey, corresponding to the middle of the feminine distribution, while the other half were told they scored an "18," a number just within the typical masculine range of the scale.

Dependent measures.—Participants were next asked to fill out two survey packets. One was a Political Views Survey and assessed participants' attitudes toward homosexuality and the Iraq War, in addition to a variety of filler items. Participants rated on 7-point scales their support for a constitutional amendment banning same-sex marriage, the gay rights movement (reverse-scaled), and whether they thought homosexuality was "always" or "never wrong." These three measures were averaged to form a composite

³ This notion that masculinity and femininity lie at two ends of a single spectrum of gender identity is inconsistent with much of the gender literature and with the actual scoring of the Bem Sex Role Inventory. Nonetheless, pilot testing indicated that participants generally viewed this feedback as highly credible and consistent with their own view of gender identity.

measure of negative attitudes toward homosexuality (Cronbach's $\alpha = .89$). Participants also rated on 7-point scales their support for "President Bush's decision to invade Iraq" and approval of "President Bush's handling of the war in Iraq." These two items were averaged to form a composite measure of support for the Iraq War (Cronbach's $\alpha = .93$). The political views survey also included a standard measure of positive and negative affect (the PANAS), asking participants to indicate on a 5-point scale how much each of 20 emotions items described their feelings at the time (Watson, Clark, and Tellegen 1988).

Participants also filled out a Car Purchasing Survey, which included one-page descriptions of four different Ford automobiles (an SUV, a minivan, a sedan, and a coupe), including pictures, engine specifications, and fuel economy information. Participants were asked to carefully examine each vehicle's description before filling out a survey on the back page assessing attitudes toward each vehicle. Participants indicated on a 10-point scale how "desirable" each vehicle was, how much they would be willing to pay for each one, and which they would be most likely to buy. The order in which participants completed the political views and car purchasing surveys was randomized. Finally, participants were sensitively debriefed regarding the deceptive gender identity feedback, thanked for their participation, and paid. Debriefing carefully followed procedures developed for studies involving false feedback (Ross, Lepper, and Hubbard 1975; Aronson et al. 1990).

Results

Table 1 gives means for men's and women's attitudes toward the Iraq War and homosexuality. Ratings are mostly low relative to each composite scale's midpoint of "4," suggesting that participants reported generally positive views of homosexuality and low support for war. Turning to our predictions, we find that men whose masculinity was threatened reported significantly greater support for the Iraq War and more negative views of homosexuality than did men in the study whose masculinity was not threatened (P 's $< .05$). Women, however, showed no significant differences across conditions in their reported attitudes.

Turning to our predictions regarding vehicle preferences, men whose masculinity was threatened reported viewing the SUV as more desirable and reported being willing to spend more money to purchase it than did unthreatened men. On average, men whose masculinity was threatened reported a willingness to pay \$7,320 more for the SUV than did men whose masculinity was not. There were no significant differences between threatened and unthreatened men in their ratings of the other three vehicles (P 's $> .25$).

TABLE 1
THE EFFECTS OF GENDER IDENTITY FEEDBACK ON MEN'S AND WOMEN'S SUPPORT FOR THE
IRAQ WAR, VIEWS OF HOMOSEXUALITY, AND DESIRE TO PURCHASE AN SUV

	Gender Identity Threatened (Mean)	Gender Identity Not Threatened (Mean)	<i>t</i>
Men (<i>N</i> = 51):			
Support for Iraq War	3.64 (1.85)	2.65 (1.52)	2.06*
Negative views of homosexuality	4.03 (1.68)	2.77 (1.60)	2.70**
SUV desirability	6.56 (2.63)	4.84 (3.16)	2.09*
SUV pay (in thousands of dollars) . . .	28.00 (13.76)	20.68 (10.63)	2.10*
Women (<i>N</i> = 60):			
Support for Iraq War	2.52 (1.59)	2.40 (1.39)	.30
Negative views of homosexuality	2.54 (1.81)	2.20 (1.52)	.80
SUV desirability	5.20 (3.03)	5.17 (2.74)	.05
SUV pay (in thousands of dollars) . . .	22.52 (14.6)	25.38 (19.52)	.63

NOTE.—SDs are in parentheses.

* $P < .05$.

** $P < .01$.

Women showed no significant differences across conditions in how desirable they felt any of the vehicles were, nor in how much they were willing to pay for them. Finally, a higher proportion of threatened men (40%) than unthreatened men (16%) reported being most likely to buy the SUV from among the four vehicles ($\chi^2(1) = 3.57$, $P = .059$); however, we found no difference between threatened (17%) and unthreatened women (17%).

We also explored participants' reported emotions. These analyses were largely exploratory. One could imagine that men whose masculinity was threatened might report greater negative affect. Alternatively, threatened men might express lower levels of emotions in general in effort to appear more masculine. Results supported the former prediction as threatened men reported feeling more guilty, ashamed, upset, and hostile than unthreatened men (P 's $< .05$). Women showed no differences across conditions with one exception; women given feedback that they were masculine reported feeling higher levels of nervousness than women who were told they were feminine ($P < .03$).⁴

⁴ One would expect one of the 20 items to be significant by chance using a .05 significance standard.

Discussion

Results of study 1 support the masculine overcompensation thesis. As predicted, men whose masculinity was threatened expressed more masculine attitudes than did men whose masculinity was not. Threatened men reported greater support for war, more negative views of homosexuality, and greater interest in purchasing an SUV, all attitudes that a pretest confirmed were viewed as masculine in the study population. Threatened men also reported significantly greater negative affect on multiple emotion survey items. In contrast, women showed no significant effects of the gender identity feedback.

One possible concern regarding the results of this study is that random assignment might have failed to equalize important characteristics across conditions of the study. As one way to test for this concern, we looked at participants' self-reported liberalism as reported on the demographic questionnaire administered before the experimental manipulation. Men reported effectively the same levels of liberalism in the threatened and unthreatened conditions ($t = .87, P = .39$). If anything, more liberal men were more often assigned to the threat condition, an initial difference that would make the predicted effects for support for war and expressed homophobia less likely. Indeed, in a multivariate analysis of these effects controlling for self-reported liberalism, the effects of threat for men become slightly more statistically significant. Women's reported liberalism also did not differ significantly across conditions ($t = -.26, P = .80$). We also analyzed participant's scores on the Bem Sex Role Inventory. Masculinity and femininity scores for men and women did not vary across conditions (P 's $> .29$); nor did they interact with any of the main effects reported here.

Thus, we have evaluated several alternative accounts for the data beside the masculine overcompensation thesis, including the possibilities that (1) men and women react to gender identity threat with extreme gender-typed behaviors, (2) men assigned to the masculinity-threat condition were simply more politically conservative, and (3) men assigned to the masculinity-threat condition were more (or less) masculine (or feminine). In each case we found no support for these alternative explanations.