

How is Men's Conformity to Masculine Norms Related to Their Body Image?

Masculinity and Muscularity across Western Countries

Kristina Holmqvist Gattario and Ann Frisé

University of Gothenburg, Gothenburg, Sweden

Matthew Fuller-Tyszkiewicz and Lina A. Ricciardelli

Deakin University, Burwood, Australia

Phillippa C. Diedrichs

University of the West of England, Bristol, United Kingdom

Zali Yager

Victoria University, Melbourne, Australia

Debra Franko

Northeastern University, Boston, United States

Linda Smolak

Kenyon College, Gambler, United States

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Abstract

Previous research has suggested that men's conformity to masculine norms (CMN) is an important correlate of men's drive for muscularity. The present study aimed to further delineate the relationship between masculinity and men's body image by examining various dimensions of CMN in relation to various dimensions of men's body image (muscularity, leanness, and fitness) in a cross-national sample. Participants comprised young men from the United States ($n = 192$), the United Kingdom ($n = 141$), Australia ($n = 160$), and Sweden ($n = 142$). Multi-group path analyses showed that CMN was related to drive for muscularity, leanness, and fitness in all four countries, but there were differences across countries in which dimensions of CMN predicted men's body image. Whereas conformity to the masculine norm of winning was a salient predictor across the four countries, conformity to the norm of risk-taking was linked to Australian men's body image, and conformity to the norm of violence to British men's body image. The findings support previous research suggesting that men's endorsement of the male gender role plays a significant role in their desire for an ideal body, but the results uniquely document that this relationship may differ across countries.

Keywords: masculinity, body image, muscularity, leanness, fitness, cross-national differences

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Masculinity and Muscularity across Western Countries

Young men often view the attainment of a muscular body as indicative of having reached the status of being a man (Calogero & Thompson, 2010). Indeed, researchers (e.g., Grogan & Richards, 2002) suggest that one of the main reasons why muscularity is so important to young men is because of its assumed link to masculinity. The male body ideal – a muscular, lean, fit, and mesomorphic body build - may be one of the most conspicuous symbols of the Western stereotype of traditional hegemonic masculinity, characterized by physical prowess, virility, and dominance (Calogero & Thompson, 2010; Jandt & Hundley, 2007). Likewise, this masculine stereotype is closely connected to men's fears of appearing physically inadequate and their desire for muscularity, physical bulk, and strength (Mills & D'Alfonso, 2007). Indeed, as many as 70-90% of Western men report wanting to become more muscular (Frederick et al., 2007). While some level of drive for muscularity may be healthy considering the rising trends of obesity world-wide (see e.g., World Health Organization, 2014), many men engage in potentially unhealthy and dangerous muscle-building strategies, including extreme exercise regimes and the use of steroids (McCreary, 2012). These body altering behaviors are reminders of the significance that body image concerns may have in men's lives today, and demonstrate the need to better understand the processes by which young men develop concerns with their bodies. In the present study, conformity to traditional masculine norms is investigated as a key to this understanding.

Mahalik et al. (2003) have identified eleven masculinity norms in Western (U.S.) society: winning (i.e., drive to win), emotional control (i.e., emotional restriction and suppression), risk-taking (i.e., penchant for high-risk behaviors), violence (i.e., proclivity for physical confrontations), dominance (i.e., general desire to have personal control over

situations), playboy (i.e., desire for multiple or non-committed sexual relationships and emotional distance from sex partners), self-reliance (i.e., aversion to ask for assistance), primacy of work (i.e., viewing work as a major focus of life), power over women (i.e., perceived control over women at both personal and social levels), heterosexual self-presentation (i.e., aversion to the prospect of being gay, or being thought of as gay), and pursuit of status (i.e., being pleased with being thought of as important). Research has shown that men's conformity to these norms can be beneficial in fostering acceptance from social groups, resulting in both social and financial rewards (Mahalik, Talmadge, Locke, & Scott, 2005). However, conformity to masculine norms has several costs as well, including potential negative effects on men's physical and mental health, their close relationships, and their level of engagement in health risk behaviors (Mahalik et al., 2005; Mahalik, Walker & Levi-Minzi, 2008; Rice, Fallon, & Bambling, 2011). Because of the proposed link between masculinity and muscularity, conformity to masculine norms (CMN) has also been suggested to be associated with men's body image and desire for muscularity. Studies have shown that the more men conform to traditional masculine norms, the more likely they are to suffer from muscle dissatisfaction and to strive for a more muscular body build (Frederick et al., 2007; Kimmel & Mahalik, 2004, 2005; Mahalik et al., 2003; Smolak & Murnen, 2008; Steinfeldt et al., 2011).

While the findings above add to the understanding of the link between masculinity and men's body image, the research conducted so far has several limitations. Firstly, previous research has typically been restricted to the experiences of US men. Since definitions and expressions of masculinity are highly culturally dependent (Tager & Good, 2005), there may be differences across countries in the role played by masculinity in men's body image. To our knowledge, there are no studies examining the relationship between masculinity and men's body image from a cross-national perspective. While research has shown that Western media

targeting men is permeated by stereotypic messages linking masculinity to the lean and muscular body ideal, it has been argued that this link needs to be examined across countries (Ricciardelli, Clow, & White, 2010). For instance, it is possible that the relationship between CMN and men's body image differs in character and strength depending on each country's cultural perceptions about what constitutes masculinity. A related example from previous research showed that the relationship between CMN and perceived interpersonal competence in the job differed across countries depending on what ways were seen as appropriate for men to interact by the cultural values of that country (Lease et al., 2013). In a similar way, CMN and men's body image may interact differently across countries and highlight possible differences in the cultural meanings of masculinity in relation to the male body and appearance.

Secondly, studies examining masculinity and men's body image have focused predominantly on the subject of muscularity, neglecting other important aspects of male body image. Men's body image concerns not only involve preoccupation with muscularity but also with leanness (McCreary, 2011). "Drive for leanness" refers to a motivating interest in having relatively low body fat and toned, physically fit muscles (as opposed to body-builder muscles; Smolak & Murnen, 2008). In addition, McCabe and McGreevy (2010) argued that men of all ages equate body image less with appearance and more with "function, fitness and health" (p. 1003). Men's conformity to masculine norms may therefore be related to several aspects of their body image, including their drive for muscularity, leanness, and fitness.

Finally, it should be emphasized that men's conformity to masculine norms is a multidimensional concept that includes various dimensions of masculine norms (e.g., winning, emotional control, risk-taking), as has been primarily measured by the Conformity to Masculine Norms Inventory (CMNI; Mahalik et al., 2003) or its shorter version CMNI-46 (Parent & Moradi, 2011). Although men's total score on the CMNI has been linked to their

drive for muscularity (Kimmel & Mahalik, 2004, 2005; Mahalik et al., 2003; Smolak & Murnen, 2008; Steinfeldt et al., 2011), results have been inconsistent as to *which* of the masculine norms are particularly salient in predicting men's body image. Mahalik et al.'s (2003) study of US college men ($N = 157$), showed only that men's conformity to the norm of winning was related to their drive for muscularity. In another sample of US college men ($N = 95$), Smolak and Murnen (2008) found that conforming to both the norm of winning and to the norm of heterosexual self-presentation were significant correlates of drive for muscularity and drive for leanness. Finally, studying masculinity within the sport context ($N = 153$), Steinfeldt et al. (2011) showed that US male college football players' conformity to a range of norms (winning, emotional control, risk-taking, violence, self-reliance, and heterosexual self-presentation) predicted their drive for muscularity.

The purpose of the present study was to examine men's CMN in relation to their body image. We aim to do so by considering each of the various masculinity norms (e.g. winning, emotional control, risk-taking) as well as a wide range of men's body image orientations (muscularity, leanness, and fitness). Furthermore, we aim to study these in young men from four Western countries: Sweden, the US, the UK, and Australia. Men in these four countries are likely to be exposed to similar media portrayals of the lean, fit, and muscular male body ideal; however, they may differ in their degree of CMN. It is possible that men in Sweden, one of the most gender equal societies in the world (Guiso et al., 2008), conform less to traditional masculine norms than men in the other countries. According to the latest Global Gender Gap Report (2013), which ranks the degree of gender equality in nations worldwide, Sweden ranked 4th, whereas the other countries in this study ranked lower: UK was 18th, US 23rd, and Australia 24th. Also, when investigating attitudes towards gender role norms across thirty countries, Stavrova, Fetchenhauer, and Schlösser (2012) found that Swedes reported less traditional gender role norms than most other nationalities, including the UK, the US, and

Australia. Indeed, Swedish culture emphasizes equal opportunities for men and women - demonstrated in the high female labor force participation (79% of 20-64-year-olds; Statistics Sweden, 2009), the low salary gaps between men and women, and the abundant opportunities for women to rise to positions of leadership in the workplace (Global Gender Gap Report, 2013). Equal opportunities, as well as responsibilities, for Swedish men and women are not restricted to the workplace, but also extend to housework and child care. As an example, the Swedish parental leave system is designed so that both men and women should be able to combine work and parenthood (Haas & Hwang, 2000). Swedish men take more parental leave than do any of their Nordic counterparts, with the exception of Icelandic men (Statistics Sweden, 2009). Thus, Swedish men, living under these premises, may conform less to masculine norms than other Western men.

Men in the US, in contrast, have been shown to endorse masculine norms to a greater extent than men in other Western societies. Investigations of American men's CMN in relation to other nationalities have found that they are more traditional in their gender role than both Norwegian (Lease et al., 2013) and Italian men (Tager & Good, 2005). Conformity to masculinity norms by Australian men has been investigated in several studies (Boman & Walker, 2010; Hunt & Gonsalkorale, 2014; Hunt, Gonsalkorale, & Murray, 2013; Iwamoto, Cheng, Lee, Takamatsu, & Gordon, 2011; Mahalik, Levi-Minzi, & Walker, 2007; Rice, Fallon, Aucote, & Möller-Leimkuhler, 2013; Rice, Fallon, & Bambling, 2011); however, never in relation to other Western men's CMN, or in relation to body image. To our knowledge, there is no study of CMN among men in the UK, though British men's narratives about masculinity in relation to health-seeking behavior have been investigated (Farrimond, 2012). In addition, Feasey (2009) examined depictions of masculinity in British television adverts for men's grooming products. Both Farrimond (2012) and Feasey (2009) argue that images of masculinity in British society are changing to become less traditional, though

hegemonic representations are still highly present. The latter is in line with popular views describing Britain as a culture of 'hyper-masculinity'. Britain's public health minister Diane Abbott (Demos, 2013) recently raised concern about this when she described how rapid economic and social change in the country has contributed to the prevailing culture of heartlessness, disrespect for women's autonomy, and the normalization of homophobia among British men today.

Overall, these descriptions of masculinity in the US, Australia, and the UK suggest that men in these countries may endorse a more traditional masculinity and therefore report higher CMN than men in Sweden. However, the extent to which these possible differences in CMN may impact on men's body image in these four countries remains unexplored.

Research Questions

To explore the relationship between masculinity and body image across Western countries, we pose the following research questions:

1. Are there differences between men in Sweden, the UK, Australia, and the US as regards to their degree of CMN and body image (drive for muscularity, leanness, and fitness)? In line with statistical reports (Global Gender Gap Report, 2013) and previous research findings (Stavrova, Fetchenhauer, & Schlösser, 2012) that have shown that gender equality and flexible gender roles are emphasized among Swedes, we hypothesized that men in Sweden will report lower CMN than men in the other three countries. Since men in all four countries are exposed to the ubiquitous Western male body ideal, we expect them to be similar in their body image.
2. To what extent is men's CMN related to their body image (drive for muscularity, leanness, and fitness) in Sweden, the UK, Australia, and the US? Further, are there any differences in *which* specific masculine norms predict men's body image across the four countries? This research question is mainly exploratory since no previous study

has examined the relationship between men's CMN and body image in Western countries other than the US. We hypothesize, however, that CMN will be related to body image in all four countries, although there may be differences in the strength of this relationship. In particular, we expect the relationship to be weaker among Swedish men, since the gender egalitarian focus in Sweden may have led to differing perceptions of masculinity among Swedish men. Finally, in line with previous research (Mahalik et al., 2003; Smolak & Murnen, 2008; Steinfeldt et al., 2011), we expect conformity to the norm of winning to be a salient predictor of body image across countries.

Method

Participants

In total, 160 Australian, 141 British, 192 American, and 142 Swedish male university students participated in this study. As shown in Table 1, demographics were similar across the four samples, although Australian and Swedish participants were older than UK and US based participants; $F(3, 629) = 43.53, p < .001, \eta^2 = .17$. Also, a one-way ANOVA demonstrated that BMI differed across cultures with Australian participants having the highest BMI and Swedish participants having the lowest BMI; $F(3, 629) = 3.06, p = .028, \eta^2 = .01$. For all countries, heterosexual orientation was by far most common, and the overall distribution across the sexual orientation groupings did not differ across countries; $\chi^2(df = 9; N = 635) = 14.17, p = .12, \text{Cramer's } V = .09$.

Measures

Demographic information. Participants were asked to provide their date of birth, sexual orientation (*heterosexual, homosexual, bisexual, other/rather not say*), height, and weight. Based on their self-reported height and weight, we calculated the participants' body mass indexes (BMI) using the formula $\text{weight (kg)} / \text{height}^2 \text{ (m)}$.

Conformity to Masculine Norms Inventory-46 (CMNI-46; Parent & Moradi, 2009).

The original CMNI (Mahalik et al., 2003) was developed to measure endorsement of traditional masculine norms in Western (U.S.) culture. In this study, we used the short version of the CMNI, which comprises 46 items covering 9 norms: Winning (e.g., "In general, I will do anything to win"), Emotional Control (e.g., "I tend to keep my feelings to myself"), Risk-Taking (e.g., "I frequently put myself in risky situations"), Violence (e.g., "Sometimes violent action is necessary"), Playboy (e.g., "If I could, I would frequently change sexual partners"), Self-Reliance (e.g., "I hate asking for help"), Primacy of Work (e.g., "My work is the most important part of my life"), Power over Women (e.g., "In general, I control the women in my life"), and Heterosexual Self-presentation (e.g., "I would be furious if someone thought I was gay"). Items are answered on a 4-point scale (0 = *strongly disagree* to 3 = *strongly agree*), with subscale scores derived by averaging relevant items. The CMNI-46 has shown good internal consistency and concurrent validity with other masculinity-related measures (Parent & Moradi, 2011).

The CMNI-46 had to be translated to be used in Sweden. A member of the Swedish research team was in charge of the translation and discussed problematic wordings with the Swedish authors until they reached agreement on all items. Another research member then back translated the scale. The researchers discussed any inconsistencies in the back translation in relation to the original version and made a few adjustments to the final version. This final version was pilot-tested with two young adults.

In the present study, the CMNI demonstrated good internal consistency in all countries for the individual subscales: .84 (US) to .89 (UK) for winning, .89 (US) to .91 (UK) for emotional control, .70 (US) to .88 (Sweden) for risk taking, .79 (UK) to .87 (US) for violence, .76 (US) to .81 (Australia) for power over women, .75 (Sweden) to .84 (UK) for playboy

lifestyle, .84 (US) to .87 (UK) for self-reliance, .72 (Sweden) to .80 (Australia) for primacy of work, and .87 (Sweden) to .91 (UK) for heterosexual self-presentation.

Body image measures. The Drive for Muscularity Scale (DMS; McCreary & Sasse, 2000) contains a seven-item attitudinal subscale of drive for muscularity (e.g., "I wish that I were more muscular") and a seven-item muscularity behaviors subscale (e.g., "I lift weights to build up muscle"). Each item is scored on a six-point scale ranging from 1 (*never*) to 6 (*always*). In the present study, we used only the total scale scores. These scores were calculated by averaging the respective items; higher scores indicate greater drive for muscularity. As suggested by the authors of the DMS (McCreary, Sasse, Saucier, & Dorsch, 2004) we excluded the item "I think about taking anabolic steroids" when calculating the total score. The DMS has been shown previously to be internally consistent, stable over short-time frames, and converge with other measures of muscularity (McCreary, 2007). In the present study, Cronbach's alpha ranged from .85 (Sweden) to .91 (Australia).

The six items on the Drive for Leanness scale (DLS; Smolak & Murnen, 2008) assess attitudes regarding personal desire to be lean (e.g., "My goal is to have well-toned muscles"). All items are rated on a scale ranging from 1 (*never*) to 6 (*always*). Items are summed to create a total score. A high score indicates higher drive for leanness. The DLS have shown to have adequate internal consistency and test-retest reliability (Smolak & Murnen, 2008). In the present study, Cronbach's alpha ranged from .82 (US) to .88 (UK).

Drive for fitness was assessed using the 13-item fitness orientation subscale of the Multidimensional Body Self-Relations Questionnaire (MBSRQ; Brown, Cash, & Mikulka, 1990). The fitness orientation subscale assesses investment in fitness level (e.g. "I work to improve my physical stamina"), on a scale from 1 (*definitely disagree*) to 5 (*definitely agree*), with higher scores indicative of more value placed on fitness and more involvement in fitness activities. The fitness orientation subscale has shown to have high internal consistency in

previous studies (Brown et al., 1990, Paxton & Phythian, 1999). Similarly, in the present study, Cronbach's alpha ranged from .87 (US) to .92 (Sweden).

The Swedish versions of the body image scales were obtained according to the translation process described above (see CMNI-46) and were pilot tested at the same time.

Procedure

The Swedish participants were recruited from a large longitudinal project. These participants were originally recruited to the study at age 10 when the Swedish research team administered a questionnaire about body image and bullying in 53 fourth grade classes in different socio-economic areas of the city of Gothenburg (second largest city in Sweden). The Swedish participants have thereafter participated in the longitudinal project at age 13, 16, 18/19, and 21 (see e.g., Erling & Hwang, 2004; Frisén, Lunde, & Berg, in press; Frisén & Holmqvist, 2010; Holmqvist, Lunde & Frisén, 2007; Lunde & Frisén, 2011; Lunde, Frisén & Hwang, 2006, 2007). At the follow-up at age 21 (the focus of the present study), participants were contacted by postal mail or e-mail, depending on the contact details they had provided at their previous participation in the longitudinal study. These postal mails or emails included information about the study and an internet link to an online questionnaire. When the participants had completed the survey, they were offered a movie ticket or a national lottery ticket as compensation for their participation in the study. Sixty-four percent ($n = 617$) of the original sample at age 10 ($n = 960$) participated at age 21. Of these, 277 were men. In order for the samples in the four countries to be as comparable as possible, we included only the university students in the present study, $n = 142$.

The Australian, British, and American participants were not part of a longitudinal project and were thus recruited for the purpose of the present study. Recruitment occurred at universities in the three countries (e.g., by student mailing lists and participant pools), but also through friends and acquaintances of the researchers, using convenience and snowball

sampling techniques. Recruitment also included advertising through posters and flyers distributed on university campuses and via the social networking website, Facebook. Data collection was conducted in online format in the UK and the US. In Australia, both online and paper-based formats were used, depending on the access to participants.

British and American students recruited through the universities received course credit for their participation. British participants recruited outside of the context of university had the opportunity to enter a prize draw for a £30 Amazon voucher. In Australia, participants entered in the draw to win one of ten \$30 Coles-Myer gift vouchers.

In all countries, participants were informed about the study and that their answers would be treated confidentially.

Data Analytic Strategy

A series of ANOVAs evaluated cross-national differences in masculine norms and body image measures. Post hoc testing was undertaken, using Games-Howell test to control for unequal sample sizes and Type I error inflation (Howell, 2010). Multi-group path analysis was conducted in AMOS version 21 to evaluate cross-national differences in the contributions of the dimensions of conformity to masculine norms for predicting the body image measures (which were also co-varied). Evaluation of the equivalence of this path model across countries consisted of two steps. First, in the baseline/unconstrained model, the path model was fit simultaneously for the four groups, without imposition of equality constraints on model parameters across groups. This enables calculation of unique parameter estimates for each country, permitting the possibility that the influences of CMNI subscales on the body image outcomes was stronger in some countries than others. In the second step (the constrained model), equality constraints were placed on parameter estimates to test the plausibility of the notion that the influence of the CMNI subscales on the body image outcomes was equal across the four countries.

Because the parameter estimates will always vary to some extent across groups, forcing equality constraints upon the path model leads to worsened model fit for the constrained model relative to the unconstrained model. This worsening of fit forms the basis for assessments of model equivalence across countries. Consistent with standard recommendations in the literature (e.g., Cheung & Rensvold, 2002), statistical significance of model worsening was tested using the likelihood ratio test, which compares the χ^2 values of the baseline and constrained models ($\chi^2_{\text{constrained}} - \chi^2_{\text{unconstrained}}$), with degrees of freedom equal to $df_{\text{constrained}} - df_{\text{unconstrained}}$. As χ^2 is sensitive to sample size and minor departures from normality (Di Stefano & Hess, 2005), the likelihood ratio test was augmented with a test of practical change in fit between the baseline and constrained models ($\Delta\text{CFI} > .010$ indicated worse fit from a practical perspective; Cheung & Rensvold, 2002). In the present study, the baseline model consumes all degrees of freedom and is thus a saturated model ($\chi^2 = 0$, $\text{CFI} = 1$, and $\text{RMSEA} = 0$). Therefore, likelihood ratio tests are mathematically equivalent to the significance of the χ^2 value for the constrained model. Similarly, change in CFI was calculated as $1 - \text{CFI}_{\text{constrained}}$.

Finally, in the event of practically or significantly poorer model fit in the constrained model, the constrained model was retested with pairs of countries to identify the source of misfit. In these comparisons, the Swedish group was used as a reference group to determine whether it differed against any of the other three countries. For all path analyses, age and BMI were added as covariates given that these variables differed across countries and are repeatedly shown to be related to body image (e.g. Holsen, Jones, & Birkeland, 2012; Peat, Peyerl, Ferraro, & Butler, 2011). Additionally, these models were estimated using maximum likelihood estimation with bias-corrected bootstrapping (Shrout & Bolger, 2002) to more accurately estimate parameters and their standard errors (MacKinnon, Lockwood, & Williams, 2004).

Results

Data Screening and Preparation

Data were screened for each of the four groups separately to ensure they met the assumptions of path analysis (Tabachnick & Fidell, 2007). As missing data accounted for less than 5% of data points in total, and exhibited a random pattern (Little's MCAR test $p > .05$ for all groups), expectation maximization was used for data imputation. All variables had acceptable absolute skew and kurtosis values, negating the need for transformation (Curran, West, & Finch, 1996). While several outliers were identified, they were retained in the analysis as: (1) they were within the possible range of scores for their respective variables; and (2) the bootstrapping approach used reduces their impact on model parameters (Byrne, 2011).

Descriptives and Group Difference Tests

To test our first research question, whether there are differences between men in Sweden, the UK, Australia, and the US as regards to their degree of CMN and body image, we conducted ANOVAs of all study variables. It was found that there were significant cross-national differences across all variables, except for the emotional control, playboy lifestyle, and self-reliance dimensions of masculine gender norms (see Table 2). Effect sizes ranged from small to moderate, with largest differences observed for the power over women masculine gender norm and drive for leanness. In contrast to our hypothesis, the power over women norm was the only masculine norm to which Swedish men conformed significantly less than their counterparts in the other countries. On average, masculine gender norms were most strongly endorsed by American men, especially for norms emphasizing winning, power over women, violence, primacy of work, and heterosexual self-presentation. Australian men emphasized primacy of work and violence to a lower extent than the other participants. In relation to the body image variables, the Australian and American men had the highest scores on drive for muscularity, leanness, and fitness, whereas the Swedish men tended to report the lowest drive for muscularity and leanness (but not drive for fitness).

Multi-group Path Analyses

In exploration of our second research question, to what extent men's CMN is related to their body image in the four countries, we estimated two path models (constrained and unconstrained). These models evaluated (1) the effect of CMNI subscales on the body image outcomes separately for each country (the unconstrained model), and (2) whether forcing these relationships to take on the same value across countries significantly worsened model fit (the constrained model). As shown in Tables 3 to 5 based on the unconstrained model, the combined and relative contributions of the 9 dimensions of masculine norms had variable effects on body image variables across cultures. For the American men, the playboy lifestyle, winning, heterosexual self-presentation, and self-reliance stereotypes were the most consistent predictors of drive for muscularity, leanness, and fitness, whereas for Australian men, risk-taking was, in addition to the predictors in the American sample, a consistently strong predictor of body image. The winning stereotype was a common predictor of drive for muscularity, leanness, and fitness for Swedish men, whereas violence and work came up on multiple occasions as reliable predictors for British men.

Although the results in Tables 3 to 5 suggest that the model behaves differently across countries, formal tests of the equivalence of path model across groups (i.e., the constrained model) were undertaken by placing cross-national equality constraints on model parameters. This constrained model showed significant and practical worsening of model fit: unconstrained model: $\chi^2 = 0.00$, CFI = 1.00, RMSEA = 0.00; constrained model: $\chi^2(df = 90) = 148.78$, $p < .001$, CFI = .906, RMSEA = .064; change in model fit: $\Delta\chi^2 = 148.78$, $p < .001$, $\Delta CFI = .094$. Pairwise follow-up for significantly worsened models showed that Swedish men differed from American men (change in model fit: $\Delta\chi^2(df = 30) = 53.79$, $p = .005$, $\Delta CFI = .089$), Australian men (change in model fit: $\Delta\chi^2(df = 30) = 51.43$, $p = .009$, $\Delta CFI = .072$), and British men (change in model fit: $\Delta\chi^2(df = 30) =$

52.72, $p = .006$, $\Delta CFI = .076$). When compared against the Australian cohort, Swedish participants exhibited significantly weaker associations between playboy lifestyle and drive for muscularity ($\chi^2 = 7.83$, $p = .005$), and power over women and drive for muscularity ($\chi^2 = 4.35$, $p = .037$). The UK cohort exhibited significantly stronger (and more positive) associations than the Swedish group for the relationships between drive for fitness and risk taking ($\chi^2 = 9.39$, $p = .002$), violence ($\chi^2 = 9.25$, $p = .002$), and power over women ($\chi^2 = 6.34$, $p = .012$), and drive for leanness with self-reliance ($\chi^2 = 4.95$, $p = .026$), and weaker associations for drive for leanness with winning ($\chi^2 = 7.08$, $p = .008$) and risk taking ($\chi^2 = 9.57$, $p = .002$). Swedish participants exhibited a significantly stronger (in positive direction) association than US cohorts for the relationship between drive for leanness and risk taking ($\chi^2 = 6.50$, $p = .011$), and significantly weaker (and more negative) for the relationship between drive for leanness and self-reliance ($\chi^2 = 5.08$, $p = .024$), as well as drive for muscularity with power over women ($\chi^2 = 4.50$, $p = .034$) and playboy lifestyle ($\chi^2 = 12.42$, $p < .001$).

Discussion

The present study examined CMN in relation to body image in university men from Sweden, the US, Australia, and the UK. Overall, we found similarities in the conformity to masculine norms between the countries, and confirmed the link between CMN and drive for muscularity, leanness, and fitness in Australia, the UK, US, and Sweden. We hypothesized that Swedish men would conform less to masculine norms than men in the other countries. Instead, Swedish men generally conformed to the masculine norms to the same extent as men in the UK and Australia, whereas American men conformed significantly more than other countries. The finding demonstrates the strong presence of masculinity norms even in a more gender egalitarian society. Still, in the detailed analysis considering specific norms, Swedish men did conform significantly lower than the other men on the norm 'power over women'.

Thus, the more gender egalitarian Swedish society may influence Swedish men to think of women as more equal to them in terms of power; however, as mentioned above, Swedish men still conform just as much as British and Australian men to other masculinity norms (winning, emotional control, violence, playboy attitude, etc.).

While Swedish, British, and Australian men were similar in their degree of CMN, American men demonstrated the highest degree of conformity to several of the masculinity norms. This is in line with previous findings (Lease et al., 2013; Tager & Good, 2005) showing that American men are more traditional in their gender role than men in other Western societies. Also, the norms investigated by the CMNI were originally developed for men in US society (Mahalik et al., 2003) and may therefore be particularly salient in U.S. American culture and thereby more relevant to American men. It is possible that men in other countries endorse other components of masculinity that are not assessed by the CMNI. Future research may study masculine norms in other countries than the US, to identify culture-specific aspects of gender role norms.

For the body image variables, Swedish men reported the lowest drive for both muscularity and leanness. This finding suggests that Swedish men may be less oriented towards obtaining a lean and muscular body build than their counterparts in other Western countries. One may interpret this as a result of a greater variety of masculinities being present in Swedish society, where men take larger responsibility in both child care and house work (Haas & Hwang, 2000; Statistics Sweden, 2009). Perhaps Swedish men to a greater extent have the opportunity to choose alternative masculine ideals (that do not emphasize muscularity and leanness) to act upon and this is reflected in this finding. The finding may also be related to the Swedish men generally having a lower BMI than the other men which may indicate they are already closer to the lean muscularity ideal and therefore under less pressure to aim for that ideal.

It should be mentioned, however, that in terms of drive for fitness, Swedish men were comparable to American men and were more oriented towards fitness than British men (although not as fitness-oriented as Australian men). The focus on fitness rather than muscularity and leanness among Swedish men may be linked to physical activity and health being central components of Swedish culture. In a survey recently conducted by a national Swedish newspaper, it was shown that every other Swede between the ages of 18 and 74 exercised at least twice a week (Dagens Nyheter, 2013). Sports (mainly football and floorball), running, strength training, gymnastics, cycling, and power walks are among the most common physical activities that Swedes engage in (Swedish Sports Confederation, 2012). In addition, a physically active and healthy lifestyle is also supported within the Swedish workplace system in that many employers offer their employees a health care allowance to engage in physical activity during work hours or free time. Being fit and healthy may therefore be more important to Swedish men than being lean and muscular. It should also be noted that the body image scales used in this study were originally developed with only Americans, and may consequently better reflect their concepts of leanness and muscularity.

The highest drive for muscularity was reported among American and Australian men. Indeed, the US may be one of the most body-dissatisfied nations worldwide, and is often used as a reference group in cross-national comparisons (Holmqvist & Frisé, 2010). In relation to the sports listed earlier as popular in Sweden, NFL football is the most popular sport in the US. NFL players are massively muscular and comprise important male role models in US society, encouraging many young men to strive for a muscular body. Likewise, in Australia, the muscular body is highly visible and valued in several social contexts, e.g., in gyms, in sports, and in the beach and outdoor culture. The ideal of the strong lifesaver is an often referred to Australian icon and ideal. Future research may further explore cross-national differences in men's body image and investigate the possible explanations for these

differences. Importantly also, it is necessary to examine whether the assessment tools are really valid in all countries (e.g., through factor analyses and qualitative research), in order to interpret these cross-national differences more accurately.

Masculinity and Body Image

The general pattern was that CMN predicted body image variables in all four countries (R^2 ranging from .18 to .31). Thus, this study showed that higher CMN was not only associated with higher drive for muscularity as investigated in previous research (Kimmel & Mahalik, 2004, 2005; Mahalik et al., 2003; Smolak & Murnen, 2008; Steinfeldt et al., 2011), but also with higher drive for leanness (Smolak & Murnen, 2008) and fitness. In fact, CMN explained more than 30% of the variance (the highest explained variance across analyses) in Australian and British men's drive for fitness, providing additional support for the link between masculinity and fitness in these countries. Overall, these findings reflect the essential role played by CMN in a range of aspects of men's body image. Indeed, the dominant body ideal for men is not restricted to a muscular appearance; the functional aspects of the male body are also central (McCabe & McGreevy, 2010). Physical strength, endurance, speed, and flexibility are bodily aspects that are closely tied to a fitness perspective of the male body. Importantly, these functional aspects are also closely related to perceptions of masculinity, emphasizing physical prowess, virility, and dominance (Jandt & Hundley, 2007; McCreary et al., 2005). Men who endorse masculine norms may therefore idealize not only lean muscularity, but also physical fitness and strength.

The Unique Contribution of Each Masculine Norm to Body Image

When studying the unique contribution of each masculinity norm to men's body image (muscularity, leanness, and fitness), we found that conformity to some norms was more salient than others. Furthermore, we found that the extent to which conformity to the various norms could predict men's body image depended on both country and body image dimension.

We will begin by discussing some of the similarities across countries, and then move on to the differences.

Similarities across countries. A similarity found across countries was that conformity to the norm of 'winning' was predictive of men's body image in all four countries. This finding was in line with our expectations and supports previous research in the US (Mahalik et al., 2003; Smolak & Murnen, 2008; Steinfeldt et al., 2011). Indeed, the competitive nature of this norm, conceptualized as a 'drive to win', is characterized by setting high personal standards and having little room for failure, much like the 'drive for an ideal body.' A phenomenon not far from the 'drive to win' is perfectionism – a cognitive style, or personality trait, that implies striving for flawlessness and setting excessively high performance standards (Dionne & Davis, 2012). Perfectionism, in its maladaptive form, has been linked to body image problems among both men and women (Dour & Theran, 2011; Grammas & Schwartz, 2009).

In addition, the winning component of masculinity as well as men's body image are both closely linked to the sporting context. This particular context has been described as one of the main forums in which Western men can demonstrate the various aspects of masculinity that are closely aligned with the pursuit of muscularity, leanness, and fitness (such as competitiveness, endurance, toughness, and physical strength; Ricciardelli, 2012).

Another similarity across groups was that conformity to the norm of 'playboy' predicted men's drive for leanness in all four countries. While previous research has not linked this particular norm to men's body image, it is not surprising that men's playboy attitude may be related to a desire for an ideal, attractive body. Many men may certainly perceive striving for a lean body as an effective strategy to attract the attention of potential sexual partners. The lean body, with minimal fat and lean muscularity, has become particularly idealized during recent years with many male celebrities embodying this ideal.

Men who endorse the playboy attitude may therefore wish to attain a lean body and may thereby be at greater risk of developing body image concerns related to their leanness.

Differences across countries. While conformity to the norm of 'winning' was predictive of men's body image in all four countries, it was particularly salient among Swedish men, for which it explained considerable variance in all three body image dimensions. Swedish men who report high conformity to the winning component of masculinity are thus likely to also report a high drive for muscularity, leanness, and fitness. In line with our previous discussion, striving for an ideal body can be interpreted from a winning, or competitive, perspective. Men's drive for muscularity, leanness, and fitness may certainly be related to a wish to win, or at least to accomplish something more than others – i.e., to have larger, or more defined, muscles and to be fitter, faster, and stronger than other men. Its saliency in Swedish culture can be seen as a result of the emphasis on physical activity in Sweden and that this emphasis often comes in the form of physical competitions. Running competitions, for instance, have increased dramatically in popularity in Sweden during recent years (Swedish Athletic Association, 2013). The winning component may therefore be particularly salient in Swedish men's body image. It should be mentioned, however, that the strongest relationship between CMN and body image was between Australian men's conformity to winning and their drive for fitness (standardized coefficient .41).

A pattern that we found among Australian men only was that conformity to the norm of 'risk-taking' predicted their body image (drive for muscularity, leanness, and fitness). One may speculate whether this finding is related to a historical Australian masculinity stereotype suggested to be present in Australian society that Lucas (1997) referred to as the 'bushman' stereotype. The bushman, who was originally described as a pioneer on the rugged Australian landscape, needed to be physically tough, brave, as well as risk-taking – a stereotype which

many of today's Australian men still feel they need to conform to (Mahalik, Walker, & Levi-Minzi, 2008). One could also relate this finding to the lifesaver ideal mentioned earlier, which emphasizes muscularity, leanness, and fitness, as well as a tendency towards risk-taking behavior when saving others.

A pattern found among British men only was that conformity to the norm of 'violence' predicted their body image (drive for muscularity, leanness and fitness). Thus, while British men's proclivity for physical confrontations was not significantly higher than their counterparts, their proclivity for physical confrontations *was* associated with their body image. The more British men perceived physical confrontations to be necessary at times, the more likely they were to strive for a muscular, lean, and fit body build – a pattern that was non-existent in the other countries. One may speculate whether this finding can be linked to the proposed culture of hyper-masculinity in today's Britain, in which aggressive acts have become normalized (Demos, 2013). Certainly, a muscular and fit body can be an asset in a culture of aggression and may reflect social power that might intimidate other aggressors. Furthermore, the physical strength, endurance, and flexibility of a muscular and fit body may obviously be an advantage in actual physical confrontations. Swami and colleagues (2013) recently found positive correlations between aggressive behavior and drive for muscularity in a sample of British men (age 18-61, $N = 359$); however, when aggressive behavior was included in a regression analysis with other predictors, the only significant predictor of drive for muscularity was men's preference for social dominance. This finding shows that the link between British men's proclivity for physical confrontations and their body image found in this study should be interpreted with caution as there may be moderating factors in this relationship.

Limitations

There are several limitations in this study. First, although the study showed a relationship between men's CMN and their body image, the cross-sectional design prevents us from establishing that this relationship is causal. Future longitudinal investigations may help to establish this and can elaborate further on the processes by which conformity to masculine norms might encourage men to strive for a muscular, lean, and fit body.

It should be noted, also, that CMN only explained a relatively small proportion (approximately 20-30 %) of variance in men's drive for muscularity, leanness, and fitness. This implies that there are several other factors that may be important in explaining men's body image. In relation to the focus on gender role norms in the present study, previous research has found that men's gender role stress, i.e., fear of deviating from the masculine gender role, is positively related to men's drive for muscularity (Mussap, 2008). This particular factor, as well as other possible factors related to men's body image (e.g., socioeconomic status), may vary across countries and influence men's drive for muscularity, leanness, and fitness in different ways.

Another limitation to this study concerns the generalizability of the results given that the samples were restricted to university students. It is possible that the results would have been different had we included men from non-university contexts and of other ages, and future research may investigate how CMN and body image may interact in these men.

Also, the fact that we used self-reported height and weight to calculate BMI may be a limitation. While studies have shown that self-reported values correlate strongly ($r > .9$) with objective assessments of BMI (McAdams, Van Dam, & Hu, 2007), other studies suggest that heavier individuals may underestimate their weight (e.g., Gunnare, Silliman, & Morris, 2013). In the present study, however, BMI was only included as a covariate in the analyses, and hence, we believe that the benefits of collecting self-report data (it is quick, cost-effective, practical, suitable for online questionnaires) surpass its limitations for this particular study.

A final limitation concerns that the scales we used had to be translated into Swedish for the Swedish participants. When translating questionnaires, a number of construct and instrument biases can occur and may cause problems when comparing the scores of participants from different countries (van de Vijver & Tanzer, 2004). As previously mentioned, one may wonder whether the masculinity norms measured by the CMNI-46 are as relevant in Swedish society as they may be in (parts of) US society where the original scale was developed. While all the translated versions of the scales used in this study showed good internal consistency (.72 - .92), it would be of great value to systematically evaluate how these masculinity and body image measures are understood by participants in different countries.

Conclusions

This study explored masculinity and body image among Western men in four countries. While previous research has linked CMN to drive for muscularity among American men, the present study suggests that the relationship extends to other Western populations as well and that CMN is not only related to drive for muscularity, but also to men's drive for leanness and fitness. Importantly, the present study further elaborated the relationship between masculinity and body image, showing that the specific masculinity norms predicting men's body image may differ across Western cultures. Whereas the norm of winning was a salient predictor across the four countries, conformity to the norm of risk-taking was linked to Australian men's body image, and conformity to the norm of violence to British men's body image. The findings support previous research suggesting that men's endorsement of the male gender role plays a significant role in their desire for an ideal body, but the results uniquely document that this relationship may differ across countries. In a broader context, the study can help to delineate the similarities as well as differences between Western countries in the cultural meanings that is attached to masculinity in relation to the male body and appearance.

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Table 1

Background Information about the Participants in the Four Countries

	Australia	UK	US	Sweden
	(<i>n</i> = 160)	(<i>n</i> = 141)	(<i>n</i> = 190)	(<i>n</i> = 142)
Variable	<i>M</i> (<i>SD</i>)			
Age	21.88 (3.55)	20.50 (2.60)	19.21 (1.38)	21.25 (0.49)
BMI	24.11 (3.15)	23.53 (3.96)	23.46 (3.44)	22.92 (3.10)
Sexual orientation				
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Heterosexual	141 (88.1)	127 (90.1)	167 (87)	133 (93.7)
Homosexual	11 (6.9)	4 (2.8)	16 (8.3)	1 (0.7)
Bisexual	6 (3.8)	7 (5)	5 (2.6)	6 (4.2)
Other/rather not say	2 (1.3)	3 (2.1)	4 (2.1)	2 (1.4)

Table 2

Mean Values and Cross-National Differences on Conformity to Masculine Norms and Body Image Measures among Men in the Four Countries

	AUS	UK	US	SWE	<i>F</i>	<i>p</i>	<i>n</i> ²
Body image measures							
DFL	24.22 ^{b,c,d} (5.43)	22.64 ^{a,c} (5.74)	25.96 ^{a,b,d} (5.07)	21.65 ^{a,c} (5.61)	19.94	< .001	.087
DFM	3.05 ^d (1.07)	2.88 ^{c,d} (0.94)	3.22 ^{b,d} (0.92)	2.57 ^{a,b,c} (0.76)	14.11	< .001	.063
DFF	47.69 ^{b,d} (9.68)	41.66 ^{a,c,d} (10.43)	47.01 ^b (8.61)	45.26 ^{a,b} (11.08)	11.22	< .001	.051
Masculine norms							
Winning	1.56 ^c (.53)	1.55 ^c (.61)	1.79 ^{a,b,d} (.54)	1.59 ^c (.59)	7.26	< .001	.033
Emotional Control	1.37 (.57)	1.31 (.63)	1.40 (.61)	1.39 (.62)	0.61	.609	.003
Risk-taking	1.46 (.46)	1.52 ^d (.47)	1.46 (.43)	1.36 ^b (.60)	2.75	.042	.013
Violence	1.41 ^{b,c,d} (.64)	1.63 ^a (.55)	1.73 ^{a,d} (.59)	1.57 ^{a,c} (.59)	8.59	< .001	.039
Power over women	0.89 ^{c,d} (.56)	0.85 ^{c,d} (.55)	1.04 ^{a,b,d} (.55)	0.55 ^{a,b,c} (.54)	21.58	< .001	.093
Playboy	1.27 (.67)	1.39 (.67)	1.32 (.66)	1.26 (.63)	1.05	.370	.005
Self-reliance	1.25 (.52)	1.33 (.61)	1.30 (.54)	1.29 (.60)	0.50	.682	.002

Work	1.18 ^{b,c,d} (.57)	1.31 ^{a,c} (.56)	1.48 ^{a,b} (.60)	1.40 ^a (.57)	8.63	< .001	.039
Heterosexual self-presentation	1.03 ^c (.59)	0.93 ^c (.55)	1.28 ^{a,b,d} (.64)	1.03 ^c (.58)	11.02	< .001	.050

Notes: AUS = Australia, UK = United Kingdom, US = United States, SWE = Sweden, DFM = Drive for muscularity, DFL = Drive for leanness, DFF = Drive for fitness. ^a = group significantly differs from Australia, ^b = group significantly differs from UK, ^c = group significantly differs from US, and ^d = group significantly differs from Sweden (all tested at $p < .05$). n^2 = eta squared, and ranges from 0 (no variance explained in the DV) to 1 (100% of variance explained in the DV).

Table 3

Conformity to Masculine Norms as Predictor of Drive for Leanness by Country (standardized regression coefficients)

Masculine norms	AUS	UK	US	SWE
Winning	.20**	-.07	.23**	.27***
Emotional control	-.07	-.13	.08	-.04
Risk-taking	.21**	-.16	-.10	.12
Violence	-.04	.16*	.06	-.07
Power over women	-.01	.11	-.07	.02
Playboy	.20**	.26**	.21**	.19*
Self-reliance	.20*	.18*	.20*	-.04
Primacy of work	-.06	.23**	-.06	.17*
Heterosexual self- presentation	.13	.17*	.05	.08
R^2	.25	.22	.20	.27

Notes: AUS = Australia, UK = United Kingdom, US = United States, SWE = Sweden. All coefficients controlled for age and BMI. All body image measures were covaried.

* $p < .05$. ** $p < .01$. *** $p < .001$. R^2 reflects the variance drive for leanness explained by the CMNI subscales in each country.

Table 4

Conformity to Masculine Norms as Predictor of Drive for Muscularity by Country
(standardized regression coefficients)

Masculine norms	AUS	UK	US	SWE
Winning	.11	.03	.06	.20*
Emotional Control	-.06	-.13	.02	-.08
Risk-taking	.19*	-.12	-.07	.01
Violence	-.03	.19*	.11	.10
Power over women	.14	.17	.07	-.03
Playboy	.19*	.05	.25***	-.04
Self-reliance	.13	.10	.13	.20*
Work	-.02	.17*	.02	.26**
Heterosexual self- presentation	.07	.08	.19**	.06
R^2	.20	.19	.22	.19

Notes: AUS = Australia, UK = United Kingdom, US = United States, SWE = Sweden. All coefficients controlled for age and BMI. All body image measures were covaried.

* $p < .05$. ** $p < .01$. *** $p < .001$. R^2 reflects the variance drive for muscularity explained by the CMNI subscales in each country.

Table 5

Conformity to Masculine Norms as Predictor of Drive for Fitness by Country (standardized regression coefficients)

Masculine norms	AUS	UK	US	SWE
Winning	.41***	.17*	.31***	.30***
Emotional Control	-.09	-.02	-.03	-.13
Risk-taking	.20**	.06	.01	-.02
Violence	.02	.35***	.13	-.03
Power over women	-.23**	.06	-.09	-.16
Playboy	.17*	-.03	.03	-.03
Self-reliance	.11	-.10	.02	-.02
Work	-.01	.16*	-.01	.15
Heterosexual self- presentation	.10	.10	.16*	.08
R^2	.32	.32	.19	.20

Notes: AUS = Australia, UK = United Kingdom, US = United States, SWE = Sweden. All coefficients controlled for age and BMI. All body image measures were covaried.

* $p < .05$. ** $p < .01$. *** $p < .001$. R^2 reflects the variance drive for fitness explained by the CMNI subscales in each country.