

Masculinity impediments: Internalized masculinity contributes to healthcare avoidance in men and women

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Abstract

Gender beliefs contribute to men's healthcare avoidance, but little research examines these outcomes in women. This article models healthcare avoidance related to masculine contingencies of self-worth in men and women. Nested path modelling tested relationships between social role beliefs, masculine contingencies of self-worth, barriers to help seeking and avoidance of health care in university and non-university-student adult samples. Results indicated social role beliefs predicted masculine contingencies of self-worth in men but not in women. Regardless of gender, masculine contingencies of self-worth predicted barriers to help seeking, which predicted healthcare avoidance in both men and women. Thus, masculine contingencies of self-worth have downstream consequences for men and women through barriers to help seeking.

Keywords

gender, health behaviour, health care, men's health, women's health

Introduction

Recent data from the Centers for Disease Control (CDC) suggest that men outrank women on leading causes of death (Schiller et al., 2012) and men born in 2009 can expect to die approximately 5 years sooner than women (Murphy et al., 2013). As evidenced by the European Commission (White et al., 2011) and the US Department of Health and Human Services (Murphy et al., 2013), these health disparities are present across many Western nations and are not fully explained by physiological differences (Courtenay, 2003; Springer et al., 2012). Prior research (Addis and Mahalik, 2003; Courtenay, 2000; De Visser and McDonnell, 2013; Eisler et al., 1988; Good et al., 1989; Lee and Owens,

2002) implicates social role beliefs and masculine ideology as potential mechanisms involved in creating these disparities, although these mechanisms have not been examined in concert. This article considers the cumulative impact of gender beliefs on barriers to help seeking and avoidance of health care. This is the first study to examine the impact of prescriptive and personal

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masculine contingencies of self-worth (CSW) which may have important implications for self-regulation. Finally, these mechanisms can only contribute to gender-related health disparities if a gender difference exists among these mechanisms and outcomes; thus, we expand this research to include women.

Social role beliefs

Although little research exists related to social role beliefs and women's health, research suggests that social role beliefs directly and indirectly influence men's health. *Social role beliefs* refer to prescriptive beliefs about traits and behaviours appropriate for men and women. Men's social role beliefs predict poor diet, sedentary lifestyle, alcohol use intentions, substance abuse and heightened stress and anger to being outperformed by women (De Visser and McDonnell, 2012; Eisler et al., 1988; Lee and Owens, 2002). A review of several studies (Vandello and Bosson, 2013) implicated gender role stress in long-term health outcomes such as hypertension and immune dysfunction. Social role beliefs affect men's health indirectly through negative attitudes towards help seeking (Good et al., 1989; Lee and Owens, 2002) explaining about a quarter of the variance in the help-seeking behaviour of men (Good and Wood, 1995). Likewise, gender role beliefs perpetuate gender-related double standards in risk behaviour. For example, De Visser and McDonnell (2012) found few differences in alcohol use among men and women, but persistent stereotypes that excessive alcohol use is an accepted masculine behaviour.

Masculine CSW

CSW is a theory of self-esteem in which successes and failures in personally relevant domains influence self-worth and self-regulation over time (Crocker and Wolfe, 2001). CSW longitudinally impact future problems (Crocker and Luhtanen, 2003), interpersonal relationships (Park and Crocker, 2005) and health behaviours (Crocker and Knight, 2005) beyond

personality and overall self-esteem (Crocker and Luhtanen, 2003). Based on CSW theory (Crocker and Wolfe, 2001), we posit that endorsement of behavioural enactments of self-sufficiency and bravery (common facets of masculine ideology) comprises an important aspect of self-worth for men and women who ascribe these traits to their gender group.

Masculinities are multifaceted and diverse (Connell and Messerschmidt, 2005), and beliefs about masculinities vary between subcultures (see Connell and Messerschmidt, 2005). Evidence from multiple methodologies suggests behavioural enactment is one component through which masculinities are demonstrated (Connell and Messerschmidt, 2005; De Visser et al., 2009; Kimmel and Mahler, 2003; Levant et al., 1998; Mahalik et al., 2007; Murnen et al., 2002; Pascoe, 2005; Vandello et al., 2008). In this article, we consider the impact of two behavioural enactments of masculine ideology on barriers to help seeking: prescriptive (i.e. my gender should base their worth on their demonstrated self-sufficiency) and personal (i.e. I base my self-worth on my demonstrated bravery) masculine CSW. We refer to masculinity or masculine ideology, in this article, in relation to facets of masculine ideology encompassing the enactment of bravery and self-reliance. Bravery is a prescriptive stereotype for men (Prentice and Carranza, 2002), but not women. In general, society prescribes self-reliance stereotypes for men, but often proscribes self-reliance stereotypes for women (Prentice and Carranza, 2002). Unlike feminine ideologies (i.e. female or feminine prescriptions) which encourage care seeking (Galdas et al., 2005), prior research demonstrates masculine ideologies predict negative health outcomes for men by increasing risk taking (Courtenay et al., 2002; Peralta et al., 2010), increasing participation in injury-prone aggressive sports (De Visser and McDonnell, 2013), increasing daily stress (Levant et al., 2011) and decreasing healthcare behaviour (Calasanti, 2004; Courtenay et al., 2002; Mansfield et al., 2003; O'Brien et al., 2005; Seymour-Smith et al., 2002; Springer and Mouzon, 2011). Masculine ideology may also

exacerbate medical mistrust in male minority populations in the United States, as prior research linked the two constructs in contributing to care avoidance (Hammond, 2010; Matthews et al., 2010) suggesting that self-reliance may reflect an avoidance of dependence that encourages distrust with the medical community. This research explores whether masculine CSW held by men and women may encourage medical mistrust, which in turn is associated with delays in care and care avoidance. This research is also the first to examine contingencies regarding these traits and the consequences of masculine ideology in women.

Present study

Unlike prior studies, we detail the specific contributions of social role beliefs and masculine ideology in barriers to help seeking. Our model includes prescriptive and personal masculine CSW for the first time, which may be important for self-regulation. We also expand masculinities research to women by testing whether masculine ideology encourages similar barriers to help seeking for women (H1). Social role beliefs are hypothesized to uniquely promote masculine CSW for men and discourage masculine CSW for women (H2). Barriers to help seeking are expected to reduce preventative health care and promote delay of health care in both men and women (H3).

Method

This study first tested the hypothesized model in a university sample and replicated it in a sample of non-university-student adults. In the non-university sample, we included an expanded measure of preventive care and delay of care because non-university-student adults likely have more experience in navigating the healthcare system than university students.

University sample

In the university sample, 193 (males, $n=88$, 45.6%; females, $n=105$, 54.4%) undergraduates at a state university in the north-eastern

United States participated in exchange for partial course credit. Their mean age was 19.29 years (standard deviation (SD)=3.02). Participants identified as White ($n=87$, 45.1%), Asian ($n=63$, 32.6%), Latino ($n=13$, 6.7%), multiracial ($n=11$, 5.7%), Black ($n=9$, 4.7%) and Middle Eastern ($n=6$, 3.1%); four individuals did not indicate a race (2.1%). This sample was slightly more diverse than the wider population of American university students (see US Census Bureau, 2012) in which students identify as White (~76%), Black (~15%), Asian (~6%) or Latino (~12%), but was consistent with enrolment at the university in which it was collected. All participants in the university sample identified as heterosexual.

Non-university sample

The non-university sample ($N=298$) comprised 148 men (49.7%) and 150 women (50.3%) recruited from an online panel of paid respondents called Amazon's Mechanical Turk, which is as reliable and diverse as research participant pools (Buhrmester et al., 2011; Paolacci et al., 2010). Inclusion criteria included residence in the continental United States and English language fluency. Participants' mean age was 35.50 years ($SD=12.95$). Participants identified as White ($n=244$, 81.9%), Asian ($n=25$, 8.4%), Black ($n=14$, 4.7%), Latino ($n=9$, 3.0%), multiracial ($n=5$, 1.7%) and Native American ($n=1$, 0.3%). This sample was consistent with the characteristics of the wider panel of respondents on Mechanical Turk as well as other online panels (Paolacci and Chandler, 2014); compared to the wider US population, this sample was younger, unrepresentative of Black and Latino Americans and over-representative of Asian Americans (Miller et al., 2005). A total of 25 individuals (8.4% of total sample: 15 females, 10 males) identified as lesbian, gay, bisexual, transgendered or queer (LGBTQ). Controlling for sexuality in the common model (described below) caused the model fit to suffer ($\chi^2(6)=17.32$, $p=.008$). We decided to include the full sample for two reasons. First, excluding LGBTQ individuals did not significantly

change the model fit (excluded fit statistics: $(\chi^2(46))=55.25$, $p=.164$; root mean square error of approximation (RMSEA)=0.04 (0.00, 0.07); comparative fit index (CFI)=0.99; Tucker–Lewis Index (TLI)=0.98). Likewise, our measures of masculine ideology dealt specifically with facets of masculine ideology related to bravery and self-reliance and not heterosexism, and thus, we had no a priori reasons to expect differences by sexuality of respondents.

Measures

Social role beliefs. Participants rated their agreement with seven statements describing social roles for men and women on a scale of 1 (*strongly disagree*) to 6 (*strongly agree*). The average for the university sample was 3.06 ($SD=1.02$, $\alpha=0.82$) and the non-university sample was 2.72 ($SD=0.93$, $\alpha=0.88$).

Prescriptive masculine CSW. Participants assessed the importance of bravery and self-sufficiency for their respective gender group on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). The average for the university sample was 4.22 ($SD=1.00$, $\alpha=0.83$) and the non-university sample was 4.02 ($SD=0.92$, $\alpha=0.83$).

Personal masculine CSW. A total of 10 items assessed personal CSW related to self-sufficiency and bravery on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). The average for the university sample was 4.01 ($SD=0.90$, $\alpha=0.79$) and the non-university sample was 2.73 ($SD=0.82$, $\alpha=0.79$).

Doctor distrust. Participants rated doctor distrust using six items from the (Mansfield et al., 2005) on a scale of 1 (*not at all*) to 5 (*very much*). The average for the university sample was 2.25 ($SD=0.82$, $\alpha=0.75$) and the non-university sample was 2.73 ($SD=0.82$, $\alpha=0.72$).

Privacy concerns. Participants rated their desire for personal privacy using five items from the Barriers to Help Seeking Scale (Mansfield et al., 2005) on a scale of 1 (*not at all*) to 5 (*very*

much). The average for the university sample was 2.52 ($SD=0.87$, $\alpha=0.74$) and the non-university sample was 2.73 ($SD=0.82$, $\alpha=0.84$).

Problem minimization. Participants rated tendency to minimize problems using six items from the Barriers to Help Seeking Scale (Mansfield et al., 2005). Participants indicated their agreement on a scale of 1 (*not at all*) to 5 (*very much*). The average for the university sample was 3.05 ($SD=0.87$, $\alpha=0.81$) and the non-university sample was 2.64 ($SD=0.95$, $\alpha=0.81$).

Preventative health care. Participants in the university sample rated the frequency of preventative health care using nine items from the Multidimensional Health Behavior Inventory (Kulbok et al., 1999) on a scale of 1 (*never*) to 5 (*always*); the non-university sample completed the same scale with seven additional items. The average for the university sample was 2.52 ($SD=0.63$, $\alpha=0.76$) and the non-university sample was 2.98 ($SD=0.61$, $\alpha=0.84$).

Delay of care. Only participants in the non-university sample indicated how long they typically delay seeking care for symptoms related to infection ($M=3.31$, $SD=1.00$, $\alpha=0.81$) and injury ($M=3.59$, $SD=0.90$, $\alpha=0.86$) on a scale of 1 (*1–2 days*) to 5 (*a week or more*).

Controls. We controlled for participant race in all models because research suggests minorities less frequently use (Iscella et al., 2002; Weinick et al., 2000), have less access to (Weinick et al., 2000) and less trust in (Boulware et al., 2003; Doescher et al., 2009) the healthcare system. Students in the university sample had free access to health care on campus, health insurance, immunizations and physical examinations to enrol. Thus, we did not control for insurance or access to care in the university sample. In the non-university sample, 30.5 percent ($n=91$) of participants reported a lack of health insurance and 32.2 percent ($n=96$) did not have a primary care physician; we controlled for both variables to isolate barriers to help seeking independent of access to care.

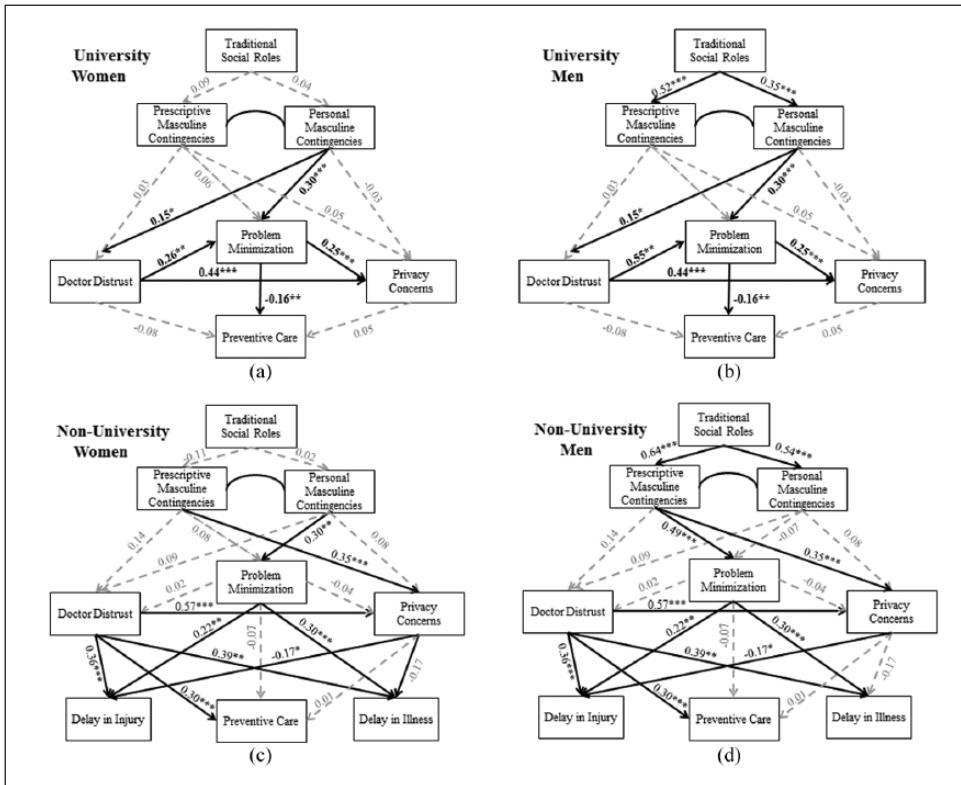


Figure 1. Model: (a) university women, (b) university men, (c) non-university women and (d) non-university men.

CSW: contingencies of self-worth.

In the university sample, all paths were constrained to be equal except the following: social role beliefs to prescriptive masculine CSW, social role beliefs to personal masculine CSW, doctor distrust to problem minimization and privacy to preventative health care. Broken paths depicted in grey were not significant. In the non-university sample, all paths were constrained to be equal except the following: social role beliefs to prescriptive masculine CSW, social role beliefs to personal masculine CSW, personal masculine CSW to problem minimization and prescriptive masculine CSW to problem minimization. Broken paths depicted in grey were not significant.

Procedure

The Institutional Review Board approved all procedures for both studies. In the university sample, participants signed up for the study online through a university-wide sampling pool. They completed an online consent form and responded to questionnaires online. In the university sample, students completed questions on social role beliefs online during a randomized pre-screening test administered to the departmental subject pool at the beginning of the semester. We presented all other measures in a random order. In the non-university online

panel, participants responded to a study advertisement displayed to the pool at large. Participants completed an online consent form, confirmed eligibility and completed all measures online in a random order.

Results

Multiple groups path analysis

A correlation table and path table are available in the supplemental material. Before testing the multiple groups model, we followed guidelines described in Kline (2011a) to determine whether

testing our models separately for men and women was appropriate. Those guidelines are as follows. Models with a good fit should have a non-significant chi-square value, a RMSEA < 0.08, a CFI at or above 0.95 and a TLI at or above 0.95 (Hu and Bentler, 1998; Kline, 2011b). Testing moderation in a multi-group model involved examining the aforementioned fit indices in the common model (i.e. model in which paths were allowed to vary between groups). If the common model met the fit criteria, moderation was tested by constraining paths individually and comparing fit indexes of constrained models to the common model using chi-square differences tests. Paths were moderated by group membership when the model fit suffered in response to constraining an individual path across groups. Moderated paths were free to vary between groups in the final model, while all other paths were constrained to be equal across groups. In accordance with fit guidelines (Kline, 2011a), the final model should demonstrate a good fit according to the above indexes, be significantly better than a path invariant model (when paths were not allowed to vary by group) and be statistically equivalent to the common model. The final model for both samples may be found in Figure 1(a) to (d), which represents university women, university men, non-university women and non-university men, respectively.

University sample. The common model fit well to the data ($\chi^2(22)=26.29, p=.239$; RMSEA=0.05 (0.00, 0.10); CFI=0.99; TLI=0.96) according to fit guidelines for path modelling (Hu and Bentler, 1998; Kline, 2011b). The following paths were moderated by gender: social role beliefs to prescriptive masculine CSW ($\Delta\chi^2(1)=9.21, p=.002$), social role beliefs to personal masculine CSW ($\Delta\chi^2(1)=5.75, p=.016$) and doctor distrust to minimization of problems ($\Delta\chi^2(1)=5.50, p=.019$). The final model allowed the aforementioned moderated paths to vary by gender and constrained all remaining paths to be equal for men and women. The final model fit (see Figure 1(a) and (b) for university women and university men, respectively) well to the data

($\chi^2(34)=38.50, p=.273$; RMSEA=0.04 (0.00, 0.09); CFI=0.98; TLI=0.98) and was significantly better than the path invariant model ($\Delta\chi^2(4)=29.50, p<.001$), but not significantly different from the common model ($\Delta\chi^2(12)=12.21, p=.429$).

As hypothesized (H1), when women held personal masculine CSW, they experienced barriers to help seeking similar to men. Prescriptive masculine CSW did not predict barriers to help seeking in men or women; however, in both men and women, personal masculine CSW predicted problem minimization and doctor distrust. Social role beliefs significantly predicted prescriptive masculine CSW ($B=0.52$, standard error (SE)=0.11, $p<.001$) and personal masculine CSW ($B=0.35, SE=0.10, p<.001$) in men but not in women. Finally, as hypothesized (H3), barriers to help seeking worked in the same way for men and women, increasing problem minimization which led to less use of preventative care ($B=-0.16, SE=0.05, p=.006$).

Non-university sample. The common model fit well to the data ($\Delta\chi^2(46)=51.69, p=.261$; RMSEA=0.04 (0.00, 0.09); CFI=0.99; TLI=0.97). The following paths were moderated by gender: social role beliefs to prescriptive masculine CSW ($\Delta\chi^2(1)=19.27, p<.001$), social role beliefs to personal masculine CSW ($\Delta\chi^2(1)=8.92, p=.003$), prescriptive CSW to problem minimization ($\Delta\chi^2(1)=8.94, p=.027$) and personal CSW to problem minimization ($\Delta\chi^2(1)=5.37, p=.020$). The final model (see Figure 1(c) and (d) for non-university women and non-university men, respectively) fit well to the data ($\chi^2(76)=67.39, p=.749$; RMSEA=0.00 (0.00, 0.05); CFI=1.00; TLI=1.03) and was significantly better than the path invariant model ($\Delta\chi^2(4)=26.03, p<.001$), but not significantly different from the common model ($\Delta\chi^2(30)=15.69, p=.985$).

As hypothesized (H1), when women held prescriptive or personal masculine CSW, they experienced barriers to help seeking similar to men. In both men and women, prescriptive masculine CSW predicted privacy concerns ($B=0.35, SE=0.09, p<.001$). In women,

personal masculine CSW predicted problem minimization ($B=0.30$, $SE=11$, $p=.005$) and in men prescriptive masculine CSW predicted problem minimization ($B=0.49$, $SE=0.13$, $p<.001$). Social role beliefs significantly predicted prescriptive masculine CSW ($B=0.64$, $SE=0.10$, $p<.001$) and personal masculine CSW in men ($B=0.54$, $SE=0.11$, $p<.001$), but not in women. Finally, as hypothesized (H3), barriers to help seeking worked in similar ways for men and women: problem minimization and privacy concerns led to longer delays of care in injury and illness in both men and women.

Discussion

This study examined masculine ideology and health using a CSW framework (Crocker and Wolfe, 2001). We proposed a model in which social role beliefs predicted prescribed and personal masculine CSW for men, but not for women; however, CSW predicted inter-related barriers to help seeking for both men and women, which were associated with less use of preventative health care in the university sample and greater delay of care in the non-university sample.

Because prescriptive stereotypes for women (Prentice and Carranza, 2002) do not include self-reliance and bravery and proscriptive stereotypes include self-reliance, we expected a negative relationship between social role beliefs and prescriptive masculine CSW for women, which was not supported by these data. Men endorsed traditional roles more than women and had higher scores on personal masculine CSW compared to women. Thus, social role beliefs may have been protective for women in terms of downstream health consequences which these data support; social role beliefs appeared unrelated to women's belief that women, as a group, should be self-reliant and brave. Social role beliefs directly predicted a number of poor health behaviours in men on their own (Eisler et al., 1988; Good et al., 1989; Good and Wood, 1995), and these data implicated social role beliefs in healthcare behaviours indirectly by encouraging masculine CSW.

Both prescriptive and personal masculine CSW predicted barriers to help seeking with small variations by sample and gender. CSW serve to regulate behaviour (Crocker, 2002; Crocker and Knight, 2005), and prior research implicated self-reliance in predicting barriers to help seeking in men (Calasanti, 2004; Springer and Mouzon, 2011). This study suggested an association between self-reliance and barriers to help seeking for both men and women, meaning this was not an explicitly male risk factor in this study. When individuals, regardless of gender, internalized these traits by staking their self-worth upon them, they experienced greater barriers to help seeking. The final hypothesis revealed that barriers to help seeking predicted less use of preventative health care and delay of care across samples in both men and women. This finding suggested that the internalization of masculine ideology has similar downstream effects for women when women adopted self-reliance and bravery as components of their self-worth.

While this study has many strengths, it is not without limitations. This study examined the cumulative impact of gender beliefs as they related to barriers to help seeking and avoidance of care. It examined facets of masculine ideology related to CSW across age groups and among men and women. Limitations of this study included its use of a correlational design from which causal inferences can be hypothesized based on prior theory, but conclusions related to causality cannot be drawn. To establish links between gender beliefs, barriers to help seeking and health care, this study examined these constructs in a quantitative design. Future research should explore these constructs, in depth, through qualitative work to examine how they function in the greater psychosocial context. We collected these data in two non-representative convenience samples: a university sample which was more diverse than the wider population of university students in the United States and an online panel which was younger and less representative of the wider racial and ethnic make-up of the United States. This affects the generalizability of these findings

to the wider population in the United States and calls for future research with nationally representative samples. Future studies should also examine these factors over time experimentally or in longitudinal designs with nationally representative samples. Despite these limitations, this study is important for several reasons. First, it uniquely took a multifaceted approach to examining gender beliefs as they corresponded to health care. It was also the first test of self-worth contingent upon embodying masculine ideology in both men and women. It provided further evidence that masculine ideology involved negative consequences related to health care in men. Importantly, this study demonstrated similar health consequences for women and men should they adopt contingent self-worth on self-reliance and bravery. The internalization of masculine ideology emerged as a risk factor overall, which suggested that both men and women should be educated about the pitfalls of masculine ideology as they relate to healthcare utilization. Failure to seek health care in either acute or preventative situations is likely to cause serious health problems by obstructing early detection and delaying treatment.

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