

Contents lists available at ScienceDirect

Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid



Gender differences in two motivational pathways to political conservatism

John S. Kubinski^{a,*}, C. David Navarrete^a, Peter K. Jonason^b

^a Department of Psychology, Michigan State University, United States

^b School of Social Sciences and Psychology, Western Sydney University, Australia

ARTICLE INFO

Keywords: Evolutionary psychology Gender differences Political orientation Morality

ABSTRACT

Gender differences in strategic interests provide a theoretical framework to account for the heterogeneous landscape of gender differences in political preferences. Men's greater scores on social dominance orientation are consistent with a preference for social hierarchy, and women's greater scores on sexual disgust, a construct tapping aversions to sexually adventurous behavior, are consistent with a preference for restricted sexuality. We analyze how these psychological motives relate to political orientation (N = 757) and find that (a) there are indirect effects of gender on conservatism through social dominance orientation and sexual disgust, (b) there is a suppressor effect such that controlling for the indirect effect through sexual disgust leads the direct effect of gender to become substantially larger, (c) gender moderates the effect of sexual disgust on conservatism such that sexual disgust is a stronger predictor of conservatism among women, and (d) conservative moral foundations mediate the effect of sexual disgust on political conservatism.

1. Introduction

Gender differences in political preferences are a reliable phenomenon. Women are more likely than men to vote for left-leaning candidates (Pew Research Center, 2016), yet gender differences in ideological orientation are not clear. While some studies find that men identify as more politically conservative than women (Pratto, Stallworth, & Sidanius, 1997), the magnitude of this gender difference varies (Jelen, Thomas, & Wilcox, 1994). In historically older samples, it was not uncommon for women to report greater conservatism than men (De Vaus & McAllister, 1989). Despite the tenuous links between gender and conservatism, differences are clearly revealed when specific policy attitudes are examined. For example, women have more liberal views regarding social compassion for disadvantaged groups (Eagly, Diekman, et al., 2004). However, there are a number of social issues related to traditional morality, religion, and the structure of the family, on which women report more conservative attitudes (Eagly et al., 2004; Ekehammar & Sidanius, 1982).

Here, we adopt an evolutionary approach to analyze how gender differences in strategic interests lead to gender differences in psychological pathways to conservatism. Evolutionary perspectives on political psychology emphasize the strategic nature of value and policy judgments (Weeden & Kurzban, 2017). We focus on the political implications of gender differences in the strategic logic of social hierarchy and restricted sexuality. Using moral foundations theory (Graham, Nosek, et al., 2011), we also examine how gender-differentiated social motives impact morality, which may serve as an intermediary between social motives and political orientation. We replicate and extend past findings linking men's preferences for social hierarchy to conservatism (Pratto et al., 1997). Importantly, we advance the study of links between sexual strategy and political conservatism by addressing the importance of women's preferences for restricted sexuality (Terrizzi, Clay, & Shook, 2014; Tybur, Inbar, et al., 2015).

1.1. Gender differences in strategic interests

Evolutionary analyses of sex differences center on differences in reproductive strategies. Because of differences in obligate parental investment, men's fitness is more strongly influenced by their access to mates, as this critically affects the quantity of potential offspring (Trivers, 1972). For women, access to mates is less critical than factors that influence offspring quality in determining fitness. As such, opportunities to gain access to mates, such as short-term or varied sexual encounters, have greater motivational salience for men, whereas relationship factors determinative of offspring quality, such as the ability and willingness of one's partner to provide support, have greater motivational salience for women (Buss & Schmitt, 1993).

Differences in reproductive interests not only affect men and women's mate preferences, but also their broader agenda in relation to the organization of society (Weeden & Kurzban, 2017). Because the ability to monopolize resources furthers the goal of accessing mates, men are more likely to benefit from principles of societal organization that allow

https://doi.org/10.1016/j.paid.2018.01.001 Received 10 August 2017; Received in revised form 30 December 2017; Accepted 2 January 2018 Available online 11 January 2018 0191-8869/ © 2018 Elsevier Ltd. All rights reserved.

^{*} Corresponding author at: Department of Psychology, Michigan State University, 316 Physics Rd., East Lansing, MI 48824, United States. *E-mail address:* kubinsk5@msu.edu (J.S. Kubinski).

themselves or the groups in which they have membership to establish inequality and ascend hierarchy. Historical and anthropological evidence indicates that as societies increase in complexity and stratification, the variance in reproductive success among men increases, with men at the top of the hierarchy experiencing large gains in relative reproduction (Betzig, 2012). For women seeking support and investment from romantic partners, their agenda is harmed to the extent that sexual encounters are easily obtained in society (Price, Pound, & Scott, 2014). When men can obtain sex by offering women only minimal levels of investment, women who request high levels of investment are more likely to have difficulty establishing a romantic relationship consistent with their preferred arrangement. Because decreasing the availability of sex furthers the goal of increasing the level of romantic investment offered by men, women are more likely to benefit from societal principles that restrict the occurrence of sexual activity outside committed relationships (Baumeister & Vohs, 2004). In terms of psychological motives, the strategy of social hierarchy is facilitated by a motivation to establish social dominance (Sidanius, Pratto, & Bobo, 1994), while the strategy of restricted sexuality is facilitated by a motivation to avoid promiscuous sexual activity, which may psychologically manifest as sexual disgust (Tybur, Bryan, et al., 2011).

As a construct, sexual disgust was initially theorized to capture reactions to detrimental sexual encounters, broadly defined (Tybur, Lieberman, & Griskevicius, 2009). Thus, the measure of the construct assesses disgust towards sexual acts that may be considered risky or socially deviant, rather than towards sexual activity in general. Functionally, sexual disgust may be thought of as a psychological reaction that tracks the costs associated with potential sexual encounters (Tybur, Lieberman, et al., 2013). Given that people who are committed to restricted sexuality would generally perceive new sexual encounters to carry greater costs (such as threatening the committed nature of current or future relationships), restricted sexuality should be associated with higher levels of sexual disgust. Indeed, restricted sexuality, measured in terms of sociosexual orientation, is associated with sexual disgust in both men and women (Al-Shawaf, Lewis, & Buss, 2015). Sexual disgust is an affective measure that captures more than a dispassionate cognitive judgment about how much one prefers to engage in certain kinds of sexual activity. The experience of disgust motivates a strong avoidance response, and the stronger the disgust reaction, the more likely an individual is to endorse moral rules condemning the disgusting act (for an illustrative examination of how disgust relates to moralizing incest, see Lieberman, Tooby, & Cosmides, 2007; Tybur et al., 2013). Thus, sexual disgust may be a good indicator of how likely individuals are to treat their aversions as more than mere preferences and moralize improper sexual activity.

1.2. Social dominance, political ideology, and morality

A distinguishing feature of conservative ideology is its acceptance of social inequality (Jost, Glaser, et al., 2003). Importantly, men are less supportive of egalitarian ideology and less accepting of minorities (Eagly et al., 2004; Pratto et al., 1997). Strategically, social inequality affords men greater opportunities to dominate in competition, consistent with the logic of their reproductive strategy. Men's inegalitarian attitudes may reflect their greater penchant for coalitional aggression over evolutionary history (McDonald, Navarrete, & Van Vugt, 2012). Research on social dominance orientation (SDO), an individual difference variable capturing one's generalized endorsement of group-based dominance, shows that men's greater preference for social dominance is found across diverse samples and cultural settings (Sidanius, Levin, et al., 2000). In studies that find a gender difference in conservatism, men's greater endorsement of group-based dominance plays a mediating role (Eagly et al., 2004; Pratto et al., 1997), a finding that we seek to replicate in the current study.

Going further, we investigate how social dominance motives play a role in gender differences in morality. In terms of moral foundations

theory, SDO is negatively related to individualizing foundations (composed of concerns about harm and fairness) and positively related to binding foundations (composed of concerns about ingroup loyalty, authority, and purity; Graham et al., 2011). Furthermore, the superordinate individualizing and binding foundations have opposite relations with prejudice against outgroups (Kugler, Jost, & Noorbaloochi, 2014). The largest gender differences in morality are found for the individualizing foundation (Graham et al., 2011), consistent with our approach emphasizing gender differences in the strategic logic of social competition. Although smaller gender differences exist for the binding foundation (Graham et al., 2011), men's endorsement of the binding foundation may be more related to dominance motivations. While endorsement of the binding foundation generally predicts less regard for outgroup members, this relationship is strongest for individuals with a weak internal moral identity (Smith, Aquino, et al., 2014). Given that social dominance motives may influence how morality is construed, in the current study, we test whether SDO is a stronger predictor of moral foundation endorsements among men compared to women.

1.3. Sexual disgust, political ideology, and morality

In addition to acceptance of inequality, conservative ideology is associated with traditional social values that restrict the range of acceptable sexual behavior and prescribe a certain family structure. Conservatives are higher on religious fundamentalism and report more disapproving attitudes towards promiscuous sexual activity and abortion (Crawford, Inbar, & Maloney, 2014; Tybur, Merriman, et al., 2010). Social restrictions on sexuality increase the level of commitment required to enter a sexual relationship and are, thus, consistent with the logic of women's reproductive strategy. Compared to men, women are more disapproving of sexual promiscuity, more supportive of religious instruction in schools, and more opposed to the legalization of prostitution (Cotton, Farley, & Baron, 2002; Ekehammar & Sidanius, 1982; Oliver & Hyde, 1993).

Individuals who are motivated to avoid promiscuous sex, such as those who report high levels of sexual disgust, have higher levels of conservatism and religious fundamentalism (Terrizzi et al., 2014; Tybur et al., 2010). With regards to morality, sexual disgust is positively associated with both individualizing and binding morality (Olatunji, Adams, et al., 2012). Sexual disgust's association with binding morality is functionally critical, given that binding morality is essential to the enforcement of social restrictions on sexual activity. Reliable gender differences in sexual disgust have been consistently documented, with women scoring a standard deviation or higher than men (Olatunji et al., 2012; Tybur et al., 2011). Research on the mediating role of sexual disgust suggests that greater sexual disgust accounts for greater cultural collectivism and religious fundamentalism among women (Terrizzi et al., 2014). In the current study, we examine the role of sexual disgust in gender differences in moral foundations and conservatism.

1.4. Current study

We investigated the links between gender and political orientation by testing for the existence of gender differences in psychological pathways relating social motives to political conservatism. Specifically, we examined paths through the motives of social dominance and sexual disgust. Based on considerations of gender differences in the strategic benefits of social hierarchy and restricted sexuality, we predicted the existence of one indirect path linking male gender to conservatism through SDO, and another indirect path linking female gender to conservatism through sexual disgust.

The existence of gender differences in social motives raises the possibility that the association between gender and political orientation is reduced by the opposing effects of different motives. Statistical suppression occurs when the entry of correlated predictors into a regression increases the predictive validity of one or both of the predictors (Paulhus, Robins, et al., 2004). Of interest in the present study is a suppression situation termed *reciprocal suppression*, where positively correlated predictors reduce each other's zero-order validities because they have opposite effects on the outcome (for a detailed treatment, see Tzelgov & Henik, 1991). Focusing on men's pathway to conservatism, the zero-order association between gender and conservatism will be weakened by the fact that men tend to be low on sexual disgust. Similarly, the zero-order association between sexual disgust and conservatism will be weakened because those high on sexual disgust are more likely to be women, who are lower on social dominance motives. To test for suppressor relationships between gender and sexual disgust, we considered whether the predictive validity of gender increases after gender differences in sexual disgust are controlled (H1).

We also tested whether gender differences in social motives produce indirect paths from gender to morality (H2). Given the hierarchy-reducing effects of the individualizing foundation and the hierarchy-promoting effects of the binding foundation, we expected that male gender would be indirectly linked to lower individualizing morality and greater binding morality through SDO (H2a). Given how the binding foundation can also serve to enforce norms of restricted sexuality, we predicted that female gender would be indirectly linked to binding morality through sexual disgust (H2b). Finally, we investigated whether moral foundations play a role in the indirect paths from gender to conservatism (H3). We tested our predictions using mediation models, and we examined whether theoretically relevant paths were moderated by gender.

2. Methods

2.1. Participants and procedure

Participants were psychology subject pool recruits from a public university in the Midwestern region of the U.S. Data were analyzed for 757 participants (27% male) who completed all relevant measures. Participants arrived at a small computer lab, where survey data were collected as part of an ongoing research project about moral judgment and social attitudes. Here, we report our analyses of political variables. Participants were assured of the confidentiality of their responses in the consent form, and measures were presented to participants in a standard order. Participant ages ranged from 18 to 46 (M = 19.88, SD = 2.67). Race demographics were as follows: 78% White, 9% Black, 8% Asian/Pacific Islander, 2% Hispanic, and 3% Other. The majority of participants had at least one parent with a Bachelor's degree or higher level of education (70%). A small fraction of the sample agreed with the statement, "My family is financially poor" (15%). A majority of the sample identified with a religious faith (70%), while a minority identified as atheist or agnostic (13%). Membership in a fraternity or sorority was relatively rare (13%). The sample was predominantly heterosexual (96%) with some homosexual (2%) and bisexual (2%) participants.

2.2. Measures

2.2.1. Social dominance

Motivation to establish social dominance was assessed using the first eight items of the Social Dominance Orientation Scale (Pratto, Sidanius, et al., 1994), anchored between 1 (*strongly disagree*) and 7 (*strongly agree*). A sample item is "Superior groups should dominate inferior groups." Participant scores were obtained by averaging (Cronbach's $\alpha = 0.91$).

2.2.2. Sexual disgust

Motivation to avoid adventurous sex acts was assessed using the seven-item sexual sub-scale of the Three Domain Disgust scale (Tybur et al., 2009), with responses ranging from 0 (*not at all disgusting*) to 6 (*extremely disgusting*). A sample item is "Bringing someone you just met back to your room to have sex." Scale items were averaged ($\alpha = 0.81$).

2.2.3. Morality

Endorsement of moral foundations was assessed using the 30-item Moral Foundations Questionnaire (Graham et al., 2011). Participants provided ratings of moral relevance (1 = not at all relevant, 5 = extremely relevant) and indicated agreement with statements (1 = strongly disagree, 5 = strongly agree) pertaining to five moral foundations, which included Harm, Fairness, Ingroup, Authority, and Purity. A sample relevance item is "Whether or not someone acted unfairly." A sample statement item is "Chastity is an important and valuable virtue." Items from the Harm and Fairness sub-scales were averaged to obtain a score for the superordinate individualizing foundation (α = 0.77), and items from the Ingroup, Authority, and Purity sub-scales were averaged to obtain a score for the superordinate binding foundation (α = 0.81).

2.2.4. Political orientation

Political orientation was assessed using a single item that allowed participants to place themselves on the political spectrum (1 = very *liberal*, 7 = very *conservative*). In past research, single-item self-placement measures of political orientation have been shown to have adequate stability and validity (Jost, 2006).

3. Results

Descriptive statistics and *t*-tests of gender differences for all study variables are reported in Table 1. Men scored higher than women on SDO (Cohen's d = 0.33), while women scored higher than men on sexual disgust (d = -1.40). Women scored higher than men on both the individualizing (d = -0.47) and binding (d = -0.27) foundations. There was no zero-order association between gender and conservatism (d = 0.06). Correlations among social motives, moral foundations, and conservatism are presented in Table 2. Sexual disgust and SDO were modestly negatively correlated, and both variables were

Table	1
-------	---

Descriptive statistics and gender differences for social motives, moral foundations, and political conservatism.

	M (SD)				
	Overall	Men	Women	t	Cohen's d
Motives					
Social dominance orientation	2.94 (1.31)	3.25 (1.35)	2.82 (1.28)	4.02***	0.33
Sexual disgust	3.75 (1.30)	2.56 (1.31)	4.19 (1.00)	- 18.10***	-1.40
Moral foundations					
Individualizing	3.86 (0.55)	3.67 (0.59)	3.93 (0.52)	- 5.86***	-0.47
Binding	3.32 (0.54)	3.21 (0.59)	3.36 (0.52)	- 3.45**	-0.27
Political conservatism	3.55 (1.46)	3.62 (1.49)	3.53 (1.45)	0.72	0.06

** p < 0.01.

*** p < 0.001.

Table 2

Correlations among social motives, moral foundations, and political conservatism.

	1	2	3	4
1. Social dominance orientation	-			
2. Sexual disgust	-0.09_{**}	-		
3. Individualizing	- 0.40***	0.19***	-	
4. Binding	0.15***	0.32***	0.31***	-
5. Political conservatism	0.20***	0.17***	-0.17	0.36***
5. Political conservatism	0.20***	0.17***	- 0	.17

** p < 0.01.

*** p < 0.001.

Table 3

Regression analyses demonstrating suppression effects in the prediction of political conservatism.

	Step 1	la	Step	1b	Step 2	2	Step 3	3
Variable Gender Sexual disgust Social dominance orientation	β 0.06	t 0.72	β 0.17	t 4.58***	β 0.38 0.26	t 3.93*** 6.02***	β 0.32 0.26 0.20	t 3.33*** 6.23*** 5.73***

Note. Gender: 0 = Female; 1 = Male.

*** p < 0.001.

associated with conservatism.

To examine the predictive validity of gender after social motives are controlled, we entered gender, sexual disgust, and SDO into a multiple regression model with conservatism as the dependent variable (Table 3). However, we entered the predictors in a series of steps in order to illustrate suppression and mediation effects. In Step 1a, gender (coded with female as the reference group) was entered by itself and was not a significant predictor of conservatism ($\beta = 0.06, p = 0.47$). In Step 1b, sexual disgust was entered by itself and was a significant predictor ($\beta = 0.17, p < 0.001$). In Step 2, sexual disgust and gender were both entered as predictors. Demonstrating reciprocal suppression between sexual disgust and gender, the inclusion of both predictors led to an increase in their regression weights. The coefficient for gender became significant ($\beta = 0.38$, p < 0.001), and the coefficient for sexual disgust increased ($\beta = 0.26, p < 0.001$). The suppressor effects show that, independent of the effect of sexual disgust, men are more conservative than women. In Step 3, SDO was entered and was a significant predictor ($\beta = 0.20, p < 0.001$). After SDO was entered, the coefficient for gender remained significant but decreased in magnitude $(\beta = 0.32, p = 0.001)$, suggesting possible mediation of the male tendency towards conservatism.

To simultaneously test for indirect effects involving SDO and sexual disgust, we entered these variables as parallel mediators in a multiple mediation model with 5000 bootstrapped samples (Fig. 1), following Hayes (2013). Given our hypotheses about gender-specific motives, we also tested whether gender moderated the path between each motive and conservatism. The effect of SDO on conservatism was not moderated by gender (p = 0.92). In the mediation model, the indirect effect of male gender on conservatism through SDO was significant $(\beta = 0.07)$ 95% CI [0.03, 0.11], as indicated by the 95% confidence interval not including zero. The effect of sexual disgust on conservatism was moderated by gender (p < 0.01). Decomposing the interaction into simple slopes showed that sexual disgust predicted conservatism among women ($\beta = 0.35$, p < 0.001), but not men ($\beta = 0.11$, p = 0.09). In the multiple mediation model, the indirect effect of gender on conservatism through sexual disgust was significant among women ($\beta = 0.44$) 95% CI [0.31, 0.58], but not men ($\beta = -0.14$) 95% CI [-0.32, 0.05].

Next, we examined whether social motives indirectly linked gender to moral foundations. We again used multiple mediator models with SDO and sexual disgust entered in parallel. There were significant

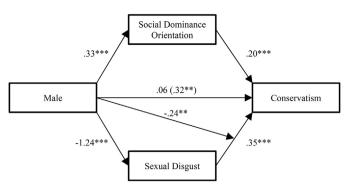


Fig. 1. Multiple mediation of the relationship between gender and political conservatism. Note. Standardized regression coefficients represent the relationships among gender, social dominance orientation (SDO), sexual disgust, and conservatism. An arrow pointing to another arrow indicates moderation. The effect of gender on conservatism, controlling for SDO and sexual disgust, is in parentheses. *p < 0.05, **p < 0.01, ***p < 0.001.

indirect effects of gender through SDO and sexual disgust on both superordinate moral foundations. Male gender was linked through greater SDO to lower individualizing ($\beta = -0.12$) 95% CI [-0.19, -0.06] and higher binding ($\beta = 0.06$) 95% CI [0.03, 0.10]. Female gender was linked through greater sexual disgust to higher individualizing ($\beta = 0.13$) 95% CI [0.03, 0.23] and higher binding ($\beta = 0.44$) 95% CI [0.33, 0.57].

We also tested whether the relationships between social motives and moral foundations varied by gender. There was no moderation by gender for the effect of sexual disgust on the individualizing foundation (p = 0.16), the effect of sexual disgust on the binding foundation (p = 0.66), or the effect of SDO on the individualizing foundation (p = 0.47). There was moderation by gender for the effect of SDO on the binding foundation (p = 0.02). Decomposing the interaction into simple slopes showed that the effect of SDO on the binding foundation was stronger among men ($\beta = 0.31$, p < 0.001) than it was among women ($\beta = 0.12$, p < 0.01).

Going further, we used a serial mediation model to examine whether the effect of sexual disgust on conservatism was statistically mediated by the binding foundation (Fig. 2). We did not run serial mediation models examining the effect of SDO because the total indirect effect size for the SDO path to conservatism was relatively small to begin with. Serial mediation models test whether the product of each path linking a predictor to a dependent variable through a series of mediators is different from zero (Hayes, 2013). We ran a serial mediation model testing the following indirect path: Gender \rightarrow Sexual Disgust \rightarrow Binding \rightarrow Conservatism. (SDO was included as a covariate.) The serial indirect effect was different from zero ($\beta = 0.14$) 95% CI [0.09, 0.20], indicating that part of the path linking female gender to conservatism through sexual disgust is mediated by the binding foundation.

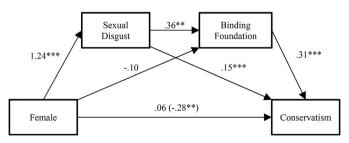


Fig. 2. Serial mediation of the relationship between gender and political conservatism. Note. Standardized regression coefficients represent the relationships among gender, sexual disgust, the binding foundation, and conservatism. The path from female to binding controls for sexual disgust; the path from sexual disgust to conservatism controls for gender and binding. Social dominance orientation (SDO) was included as a covariate in all paths. The effect of gender on conservatism, controlling for SDO, sexual disgust, and the binding foundation, is in parentheses. *p < 0.05, **p < 0.01, ***p < 0.001.

Finally, to examine the generalizability of our results, we tested whether the patterns we observed in the overall sample depended on participant ethnicity. Specifically, we focused on the two ethnic minority groups with N > 50 (Black and Asian). We conducted separate sets of two-step regression analyses for each dependent variable. In the first step, we entered ethnicity predictors by themselves to examine mean group differences in comparison to the White group, and in the second step, we entered SDO, sexual disgust, and their interaction terms with ethnicity. Gender was included as a covariate but ethnicity by gender interactions were not examined because of the small number of ethnic minority males in the sample.

There were group differences in conservatism and moral foundations such that Black participants scored lower on conservatism ($\beta = -0.38$, p < 0.01) and Asian participants scored higher on the binding foundation ($\beta = 0.33$, p = 0.02). The relationships between social motives and conservatism were not moderated by ethnicity (ps > 0.05). When examining moral foundations, one significant interaction emerged indicating that the relationship between sexual disgust and the binding foundation was weaker among Asian participants ($\beta = -0.41$, p = 0.001).

4. Discussion

We replicated associations between men's preferences for social hierarchy and conservatism (Pratto et al., 1997), and we provided new evidence relating these preferences to gender differences in morality. We replicated associations between sexual disgust and conservatism (Tybur et al., 2015), and we demonstrated that women's higher levels of sexual disgust are related to gender differences in political and moral domains. Through social dominance motives, male gender was indirectly linked to attitudes that maintain social hierarchy: greater political conservatism, lower levels of individualizing morality, and higher levels of binding morality. Through sexual disgust, female gender was indirectly linked to greater conservatism and binding morality, attitudes that support norms of restricted sexuality in society. Finally, mediation analysis suggested that the association between sexual disgust and conservatism may occur in part because sexual disgust is linked to binding morality.

Consistent with reciprocal suppressor effects (Paulhus et al., 2004; Tzelgov & Henik, 1991), we showed that the unique effects of gender and sexual disgust (controlling for each other) on conservatism were stronger than their zero-order effects. In other words, disentangling gender and sexual disgust helped to unlock the predictive power of these variables. The suppressor situation arises because men tend to be low on sexual disgust, which is one conservative motivation, but otherwise more attracted to conservatism. Thus, similar mean levels of conservatism between men and women conceal the fact that men and women tend to differ in their reasons for identifying as conservative.

The interactions between participant gender and social motives identified in this study provide evidence that men and women may approach certain domains of morality and politics with a different set of concerns. Sexual disgust interacted with participant gender to predict political orientation, suggesting that women were more likely to construe the ideological spectrum in terms related to sexual restrictedness. SDO interacted with gender to predict binding morality, suggesting that men were more likely to construe the components of the binding foundation as pertaining to the maintenance of social hierarchy. A social issue such as gay rights provides an example of how our model of gender-specific motives could be applied. For men, moral condemnation of homosexuality may be appealing because condemnation provides an opportunity to subordinate gays as a group or to enforce high standards for male coalition members with regards to masculine characteristics such as strength and aggression (Winegard, Reynolds, et al., 2016). For women, opposition to gay rights may be less likely to stem from coalitional psychology and more likely to be an expression of support for norms of restricted sexuality, which homosexuals can be

perceived as violating (Pinsof & Haselton, 2016).

4.1. Limitations and conclusions

Several limitations should be noted. First, we collected our data from college undergraduates, who are known to not be politically representative of less educated populations (Henrich, Heine, & Norenzayan, 2010). When we examined ethnic differences in the current study, we found that the relationship between sexual disgust and the binding foundation was substantially weaker among Asian participants. Although our theoretical framework does not directly address cultural differences, one possibility is that binding morality functions differently across cultural settings (e.g., emphasizing group cooperation more than sexual purity), leading to distinct motivational correlates of morality across groups. Future studies can test whether our findings are generalizable to voting populations and can apply our model to understand large-scale political phenomena such as gender differences in presidential candidate preferences (Pew Research Center, 2016) and how gender-specific sets of concerns (e.g., social equality vs. sexuality and family) are weighted in political decision-making.

While we treated sexual disgust as an indicator of one's strategic commitment to restricted (i.e., long-term, monogamous) sexual relationships, we acknowledge that there may be other sources of influence on sexual disgust and other interpretations of the content measured by the sexual disgust scale. Many items on the scale (e.g., oral and anal sex) do not have a face valid connection to restricted sexuality, as some sexual acts may be perceived as disgusting but not inconsistent with monogamy. Thus, it is possible that the sexual disgust scale measures an aversion to sexual activity in general or a broader aversion to transgressing societal norms. However, these interpretations are unlikely to account for the large gender differences in sexual disgust (Tybur et al., 2011), which are more consistent with a substantial underlying anti-promiscuity factor (Tybur et al., 2015). We would expect the pattern of findings from the current study to replicate using the sociosexual orientation inventory, a more explicit measure of restricted sexuality, as scores on sociosexuality are strongly associated with scores on sexual disgust (Al-Shawaf et al., 2015). The validity of our strategic interpretation of sexual disgust rests on the assumption that discomfort with sexually adventurous behaviors is correlated with restricted sexuality. One potential advantage of sexual disgust is that it taps emotional responses to sexual situations, and such responses may indicate not only that the participant has a sexually restricted lifestyle, but also that avoiding improper behavior in the sexual domain is particularly important to the participant (Rozin, 1999). For example, with regards to how people judge the morality of dietary and sexual practices, disgust reactions help to distinguish those who merely do not engage in a certain behavior from those who condemn the behavior, consistent with the idea that disgust may lead to moralization (Pizarro, Inbar, & Helion, 2011).

To measure political orientation, we used a single-item assessment of conservatism. The conceptual model we have put forward could be further tested using more complex multi-dimensional measures of political ideology. Sexual disgust is known to relate more strongly to social rather than economic conservatism (Tybur et al., 2015). In contrast, SDO is unrelated to religious fundamentalism but is predictive of economic conservatism and prejudice against outgroups (Altemeyer, 1998).

The conceptual model that generated our predictions assumed that social dominance and sexual disgust have causal primacy in their associations with moral and political attitudes. Given our cross-sectional data, we only offer tentative causal conclusions. For example, pre-existing moral beliefs or political socialization could conceivably result in corresponding shifts in social dominance or sexual disgust. Ultimately, the resolution of causal questions will require future studies that use longitudinal and experimental methods.

A final question beyond the scope of the current paper is how the

balance of socialization (Eagly et al., 2004) and biological preparedness (Terrizzi et al., 2014) contributes to the origins of gender differences in social motives. Here, we choose to focus on the importance of bringing a strategic lens to the study of political cognition (Weeden & Kurzban, 2017). While it may be the case that men are socialized to have more aggressive attitudes and that women are socialized to have more sexually restrictive attitudes, an evolutionarily informed consideration of the functional benefits generated by such attitudes (e.g., ascension of social hierarchy or acquisition of a suitable long-term mate) provides an ultimate explanation for why gender, social motives, and ideological beliefs covary in a strategically coherent manner (McDonald et al., 2012; Price et al., 2014).

In conclusion, the application of a strategic framework to moral and political psychology allowed us to identify gender-specific reasons that lead men and women to identify as conservative. Psychologically, men's conservatism is more likely to be motivated by a preference for social hierarchy, while women's conservatism is more likely to be motivated by a preference for restricted sexuality. Given the diversity of reasons people may have for adopting conservative ideology, we suggest that the influence of gender-specific motives may be critically overlooked in political psychology research. In some populations, gender differences in self-reported conservatism may be small, yet men and women may still have arrived at their ideological positions for different reasons. The current study illustrates the insights that can be gained by not only examining demographic predictors of political orientation, but also analyzing the strategic interests that can explain why people take unique paths in the development of their moral and political preferences.

Note

The data needed to reproduce the analyses in this study are available through the Open Science Framework at https://osf.io/nrezv/.

References

- Al-Shawaf, L., Lewis, D. M. G., & Buss, D. M. (2015). Disgust and mating strategy. Evolution and Human Behavior, 36, 199–205.
- Altemeyer, B. (1998). The other "authoritarian personality". Advances in Experimental Social Psychology, 30, 47–92.
- Baumeister, R. F., & Vohs, K. D. (2004). Sexual economics: Sex as female resource for social exchange in heterosexual interactions. *Personality and Social Psychology Review*, 8, 339–363.
- Betzig, L. (2012). Means, variances, and ranges in reproductive success: Comparative evidence. *Evolution and Human Behavior, 33*, 309–317.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204–232.
- Cotton, A., Farley, M., & Baron, R. (2002). Attitudes toward prostitution and acceptance of rape myths. *Journal of Applied Social Psychologyocial Psychology*, 32, 1790–1796.
- Crawford, J. T., Inbar, Y., & Maloney, V. (2014). Disgust sensitivity selectively predicts attitudes toward groups that threaten (or uphold) traditional sexual morality. *Personality and Individual Differences*, 70, 218–223.
- De Vaus, D., & McAllister, I. (1989). The changing politics of women: Gender and political alignment in 11 nations. European Journal of Political Research, 17, 241–262.
- Eagly, A. H., Diekman, A. B., ... Koenig, A. M. (2004). Gender gaps in sociopolitical attitudes: A social psychological analysis. *Journal of Personality and Social Psychology*, 87, 796–816.
- Ekehammar, B., & Sidanius, J. (1982). Sex differences in sociopolitical attitudes: A replication and extension. *British Journal of Social Psychology*, 21, 249–257.
- Graham, J., Nosek, B. A., ... Ditto, P. H. (2011). Mapping the moral domain. Journal of Personality and Social Psychology, 101, 366–385.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis:

A regression-based approach. New York: The Guilford Press.

- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? Behavioral and Brain Sciences, 33, 61–83.
- Jelen, T. G., Thomas, S., & Wilcox, C. (1994). The gender gap in comparative perspective. European Journal of Political Research, 25, 171–186.
- Jost, J. T. (2006). The end of the end of ideology. American Psychologist, 61, 651–670. Jost, J. T., Glaser, J., ... Sulloway, F. J. (2003). Political conservatism as motivated social cognition. Psychological Bulletin, 129, 339–375.
- Kugler, M., Jost, J. T., & Noorbaloochi, S. (2014). Another look at moral foundations theory: Do authoritarianism and social dominance orientation explain liberal-conservative differences in "moral" intuitions? *Social Justice Research*, 27, 413–431.
- Lieberman, D., Tooby, J., & Cosmides, L. (2007). The architecture of human kin detection. *Nature*, 445, 727–731.
- McDonald, M. M., Navarrete, C. D., & Van Vugt, M. (2012). Evolution and the psychology of intergroup conflict: The male warrior hypothesis. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 367, 670–679.
- Olatunji, B. O., Adams, T., ... Broman-Fulks, J. (2012). The three domains of disgust scale: Factor structure, psychometric properties, and conceptual limitations. Assessment, 19, 205–225.
- Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, 114, 29–51.
- Paulhus, D. L., Robins, R. W., ... Tracy, J. L. (2004). Two replicable suppressor situations in personality research. *Multivariate Behavioral Research*, 39, 303–328.
- Pew Research Center (2016). A closer look at the gender gap in presidential voting. Pinsof, D., & Haselton, M. (2016). The political divide over same-sex marriage: Mating strategies in conflict? Psychological Science, 27, 435–442.
- Pizarro, D., Inbar, Y., & Helion, C. (2011). On disgust and moral judgment. Emotion Review, 3, 267–268.
- Pratto, F., Sidanius, J., ... Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741–763.
- Pratto, F., Stallworth, L. M., & Sidanius, J. (1997). The gender gap: Differences in political attitudes and social dominance orientation. *British Journal of Social Psychology, 36*, 49–68.
- Price, M. E., Pound, N., & Scott, I. M. (2014). Female economic dependence and the morality of promiscuity. Archives of Sexual Behavior, 43, 1289–1301.
- Rozin, P. (1999). The process of moralization. *Psychological Science*, 10, 218–221.
- Sidanius, J., Levin, S., ... Pratto, F. (2000). Social dominance orientation, anti-egalitarianism and the political psychology of gender: An extension and cross-cultural replication. *European Journal of Social Psychology*, 30, 41–67.
- Sidanius, J., Pratto, F., & Bobo, L. (1994). Social dominance orientation and the political psychology of gender: A case of invariance? *Journal of Personality and Social Psychology*, 67, 998–1011.
- Smith, I. H., Aquino, K., ... Graham, J. (2014). The moral ties that bind... even to outgroups: The interactive effect of moral identity and the binding moral foundations. *Psychological Science*, 25, 1554–1562.
- Terrizzi, J. A., Clay, R., & Shook, N. J. (2014). Does the behavioral immune system prepare females to be religiously conservative and collectivistic? *Personality & Social Psychology Bulletin*, 40, 189–202.
- Trivers, R. L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.). Sexual selection and the descent of man, 1871–1971 (pp. 136–179). New York: Aldine de Gruyter.
- Tybur, J. M., Bryan, A. D., ... Merriman, L. A. (2011). Sex differences and sex similarities in disgust sensitivity. *Personality and Individual Differences*, 51, 343–348.
- Tybur, J. M., Inbar, Y., ... Molho, C. (2015). Is the relationship between pathogen avoidance and ideological conservatism explained by sexual strategies? *Evolution and Human Behavior*, 36, 489–497.
- Tybur, J. M., Lieberman, D., ... DeScioli, P. (2013). Disgust: Evolved function and structure. *Psychological Review, 120*, 65–84.
- Tybur, J. M., Lieberman, D., & Griskevicius, V. (2009). Microbes, mating, and morality: Individual differences in three functional domains of disgust. *Journal of Personality* and Social Psychology, 97, 103–122.
- Tybur, J. M., Merriman, L. A., ... Navarrete, C. D. (2010). Extending the behavioral immune system to political psychology: Are political conservatism and disgust sensitivity really related? *Evolutionary Psychology*, 8, 599–616.
- Tzelgov, J., & Henik, A. (1991). Suppression situations in psychological research: Definitions, implications, and applications. *Psychological Bulletin*, 109, 524–536.
- Weeden, J., & Kurzban, R. (2017). Self-interest is often a major determinant of issue attitudes. Political Psychology, 38, 67–90.
- Winegard, B., Reynolds, T., ... Plant, E. A. (2016). The coalitional value theory of antigay bias. Evolutionary Behavioral Sciences, 10, 245–269.