Assessing the ‘gender gap’ in New Zealand politics: The mediating effects of social dominance orientation in student and general population

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Sex differences in politics are commonly found in Western nations, with men tending to be more conservative than women. Research in other contexts has suggested that one potential explanation for this might be associated with sex-differences in egalitarianism – women also tend to be more egalitarian than men. As well as assessing whether there is a ‘gender gap’ in political attitudes in New Zealand, this study investigated whether the level of social dominance orientation (SDO) might mediate any sex differences in political attitudes, as men tend to be significantly higher in SDO than women. As expected, males from both student and general populations proved more social dominant than women, and were more politically conservative. In addition, SDO was found to fully mediate the relationship between gender and conservatism – suggesting that SDO is the mechanism through which sex and political attitudes are related.

The increasing involvement of women in politics over past decades has highlighted distinct gender differences in positions on political issues (Eagly & Diekmann, 2006; Vowles, 1993). More men than women tend to support issues such as longer prison sentences, while more women than men tend to support government spending on social welfare, health and education (Pratto, Stallworth & Sidanius, 1997). The gender gap in political issues often divides along the lines of conservative versus liberal, and right versus left, with men tending to be more conservative and right-wing, and women more liberal and left-leaning (Feather, 1977; McCue & Gopoian, 2000; Pratto et al., 1997; Rippl & Seipel, 1999; Sidanius & Liu, 1992). Women tend to be less supportive of military spending and involvement in war than men (Conover & Sapiro, 1993; Pratto et al., 1997; Sidanius & Liu, 1992), score lower on measures of prejudice and support for discriminatory policy (e.g., Altemeyer, 1998; Eagly, Diekmann, Johannesen-Schmidt, & Koenig, 2004; Ekehammer, 1985), are less militaristic (e.g., Doty, Winter, Peterson, & Kemmelmeier, 1997; Heskin & Power, 1994; Pratto et al., 1997; Sapiro, 2001; Shapiro & Mahajan, 1986), hold less negative attitudes towards homosexuals (e.g., Eagly et al., 2004; Whitley & Ægisdóttir, 2000), and generally hold less punitive attitudes (e.g., Ekehammer, 1985; Sears, Lau, Tyler, & Allen, 1980; Stack, 2000), to name but a few.

These sex differences appear to translate into voting behaviour, with women seven points less likely to support George W. Bush than John Kerry in the 2004 US election, and 10 points less likely in 2000 (Center for American Women and Politics, 2004). This pattern is also evidenced in New Zealand with the support for Labour as the traditional party of the left comprising more than 55% women since 1993. In contrast, National party support comprises between 45% and 50% women, while women represent as little as 30% of those voting for the Act party, the most far-right of the elected parties (e.g., Banducci & Karp, 2000; Levine & Roberts, 2000; Vowles, 1993; 2004). These trends continued in 2005 (Young, 2005). In addition, support for New Zealand’s anti-nuclear policy was stronger among women than men (Bain, 2005).

Particularly promising as a potential explanatory factor in the range of socio-political sex differences is Social Dominance Orientation (SDO: Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999), a relative newcomer to the pantheon of hot individual difference constructs in social psychology. According to Social Dominance Theory (SDT: Pratto et al., 1994; Sidanius, 1993; Sidanius & Pratto, 1999) post-industrial societies tend to develop group-oriented social hierarchies which assist in the maintenance of long-term human survival. In these hierarchies, intergroup conflict and oppression function to maintain the social system. Together with Right-Wing Authoritarianism (RWA, a syndrome of punitive and traditional social attitudes: Altemeyer, 1981; 1998) SDO is an important predictor of socio-political attitudes (Altemeyer, 1998; Sibley, Wilson & Duckitt, 2007).

Unlike RWA, however, there is consistent evidence of a sex difference in SDO (Pratto et al., 1994; Sidanius & Pratto, 1999). One of the characteristics of contemporary hierarchical systems
is that they are overwhelmingly ‘andarchical’ – males tend to hold the lions’ share of political power (Sidanius & Pratto, 1999) allowing males to act to maintain their privileged social position. It follows, then, that males should favour social systems that perpetuate hierarchies as they tend to occupy privileged positions in them. In other words there should be a sex difference with males endorsement anti-egalitarian beliefs more than females. Indeed, this ‘invariance hypothesis’ is a foundational hypothesis of SDT though, at the same time, the authors of SDT would argue that is all it is – an hypothesis open to refutation.

The invariance hypothesis has been tested directly (e.g., Pratto et al., 1997; Sidanius et al., 2000; Sidanius & Pratto, 1999) and incidentally (eg. Heaven, 1999; Pratto et al., 1994; Whitley, 1999; Whitley & Ágísdóttir, 2000) using more than 70 samples from diverse cultures and backgrounds and, until recently, had survived intact. Almost all samples do show the predicted pattern, with men endorsing anti-egalitarianism more than women, though non-significant differences have been found in a small number of studies (in Taiwan and Israel Sample 6: Pratto et al., 2000, and in an Australian sample in Bates & Heaven, 2001). A number of potentially plausible covariates have been included in analyses to assess the extent to which they might moderate the sex difference in SD0, including age, religiosity, ethnicity, social roles (e.g., public defenders versus police), income, education, national origin, gender role attitudes, and political conservatism (see Sidanius & Pratto, 1999, table 10.2, pp.277-278 for a summary). At the same time, the authors of SDT would argue that is all it is – an hypothesis open to refutation.

SD0 has also proven to be consistently related to political attitudes and voting. For example, Pratto et al. (1994) presented SD0 measures to 1,952 college students in the United States, who were diverse in terms of gender, ethnicity and income. They found that SD0 was higher in males than females (as expected), and was positively correlated with both support for the Republican party and a range of political issue positions. Similarly, Pratto et al. (1997) also examined the relationship between gender, political attitudes and SD0. Participants also indicated their political ideology. Factor analysis showed that SD0 and conservativism were empirically different and that, as expected, males scored higher on SD0 and political conservatism than women. Females showed more support for liberal issues such as racial policies and social welfare programmes, while males showed more support for conservative issues such as military programmes. Pratto et al. concluded that the political attitudes of males and females differed to the extent that they differed in SD0 rather than their political ideologies.

The relationship found by Pratto et al. (1994) between conservatism and SD0 was explained in terms of legitimising myths. Pratto et al., (1994) argue that dominant groups promote ‘myths’, such as ‘those who work hard deserve what they get’, to legitimise and preserve their positions at the top of the social structure. Conservatism can be seen as one of these legitimising myths, as a conservative position supports the status quo and current structure of society, and opposes welfare initiatives, so that those who are on top remain on top. Therefore, individuals with high SD0 who desire to have dominance over others in society would be more likely to hold conservative views that uphold this dominance. In New Zealand, as in other democracies, egalitarianism, the opposite of Social Dominance, is an important differentiator of political position – Wilson (2004) showed that the parties for which members of Parliament stand could be statistically differentiated on the basis of their endorsement of equality and, to a lesser extent, freedom.

In political attitude research, there are several ways in which researchers can ask questions about one’s ideological orientation. Almost all political science surveys include a question that asks the participant to self-identify with different ideological labels. For example, such a question might ask where the participant would consider themselves to sit on a continuum running from politically liberal to politically conservative (Knight, 1999). In New Zealand there has been some debate as to whether a liberal-conservative continuum is the most appropriate, or whether such questions might better ask about left versus right political self-identification (e.g., Aimer & Vowles, 2004). Either way, from a social psychological perspective such a question may not be desirable because it is, in effect, a single-item measure with all of the reliability and potentially some validity issues that go along with that. Alternatively, political ideology may be assessed by the use of question batteries tapping how favourable people feel towards a range of issues. Probably the most well-known of these is the Wilson-Patterson (1968) Conservatism scale. The studies reported here make use of a modified variant of this scale, as well as asking participants to self-identify in terms of liberal-conservative and/or left-right. Using all three commonly-used indices allows something of an evaluation of the convergent validity of the three.

At the same time, Sears (1986) warns against making inferences about political belief and behaviour on the basis of narrow student samples. He argues, for example, that political attitudes develop relatively late in adolescence. This is not particularly surprising given that until achieving voting age, politics and voting are not seen as directly relevant for most adolescents. With a mean age of just under 20 the student sample reported below had, on average, never voted before. Therefore, in order to assess the extent to which the potentially explanatory relationships between sex, SD0, and political ideology might generalise, we also present analysis of data using the same measures in a broader general population sample.

Regardless of the underlying mechanisms of SD0, whether biologically or socially constructed, there is a relatively consistent finding that men report higher SD0 than women. In addition, the finding that SD0 is also associated with many of the variables used to assess political attitudes leads us to propose that SD0
is the mechanism through which this ‘gender gap’ manifests. In statistical terms this implies that SDO mediates the relationship between gender and political attitudes (Baron & Kenny, 1986). It was expected that SDO would account for some, if not all, of the sex differences in conservatism in two New Zealand samples.

Method

Participants:

Student participants were 210 first-year psychology students (53 males, 157 females) with an average age of 19.98 years (SD=4.52), participating as part of a mandatory research participation component. Participation was conducted in groups of up to 15, and took approximately half an hour.

General population Participants were 115 (77 female, 38 male) people who completed and returned a mail survey sent out to 300 individuals selected at random from the New Zealand electoral roles for the metropolitan city of Hamilton. This represented a response rate of around 38%. Ages ranged from 25 to 92, with a mean age of 49.18 years. Participation was voluntary, but participants were offered an opportunity to be placed into a draw for a small monetary prize.

Materials:

Social Dominance Orientation: Participants completed Pratto et al’s (1994) 16-item SDO6 scale (student sample: α=.86, M=2.67, SD=.84; general population: α=.85, M=2.75, SD=.93). Participants were instructed to indicate their feelings towards the SDO statements on a 1 (‘Strongly Negative’) to 7 (‘Strongly Positive’) scale. Higher scores indicate increasing conservatism.

As one of the S-Conservatism subscales has been shown to reflect general anti-egalitarianism, and therefore overlaps in content with the SDO scale, items from that subscale were not included when a scale mean was computed. In the student sample, the shortened 27-item scale produced an alpha of .72 (M=3.48, SD=.50), and for the general population sample α=.80 (M=3.58, SD=.63). Items excluded were “eliminate affirmative action”, “Racial equality”, “Greater equality in salaries”, “Increased equality”, and “Social equality”.

Political self-identification: Participants were asked to self-identify on two continua – left (‘1’) versus right (‘7’), and liberal (‘1’) versus conservative (‘7’) on two seven-point scales. This was prefaced with the questions “Often, people use the terms ‘liberal’ or ‘conservative’ to describe their political beliefs. How would you rate yourself in these terms?” and “Alternatively (or at the same time), people use the terms ‘left’ or ‘right’ to describe their political beliefs. How would you rate yourself in these terms?”

The general population sample was collected through a mail-out of the questionnaire. The questionnaire thanked participants for their time, and asked them to read through the survey questions and indicate their feelings towards each one by circling a number from 1 to 7. They were advised that while some of the statements appeared contradictory, it was not an attempt to catch them out, but reflected the different perceptions that different people may have. Participants were asked for background information, but no other identification. Once questionnaires were completed, participants returned them in the prepaid postage envelope provided. Participants could also complete and return a form to enter them into the prize draw, but this form was separated from the questionnaire once the researcher opened the envelopes in order to maintain anonymity.

Results

In all subsequent analyses, participant sex was coded so that males were represented by the value ‘1’ and females with the value ‘2’. For the student sample, three of the four variables showed a significant sex-difference: Males scored as significantly more conservative than females on the S-6 Conservatism scale (M_males=3.65, SD_males=.51, M_females=3.42, SD_females=.51, t(208)=2.00, p<.05) and Liberal-Conservative self-identification (M_males=4.09, SD_males=1.16, M_females=3.40,}
Table 1. Correlations between Sex, SDO, and indices of political attitudes

<table>
<thead>
<tr>
<th>STUDENT SAMPLE(^1)</th>
<th>Left-Right</th>
<th>LibCon</th>
<th>S-6</th>
<th>SDO</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>-.03ns</td>
<td>-.26**</td>
<td>-.15*</td>
<td>-.26***</td>
<td>-</td>
</tr>
<tr>
<td>SDO</td>
<td>.38***</td>
<td>.36***</td>
<td>.52***</td>
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<td>-</td>
</tr>
<tr>
<td>S-6 Conservatism</td>
<td>.54***</td>
<td>.39***</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Liberal-Conservative</td>
<td>.45***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Left-Right</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>GEN. POPULATION(^2)</th>
<th>Left-Right</th>
<th>LibCon</th>
<th>S-6</th>
<th>SDO</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
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<td>-.16+</td>
<td>-.22*</td>
<td>-.29**</td>
<td>-</td>
</tr>
<tr>
<td>SDO</td>
<td>.09ns</td>
<td>.21*</td>
<td>.51***</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>S-6 Conservatism</td>
<td>.55***</td>
<td>.52***</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Liberal-Conservative</td>
<td>.60***</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Left-Right</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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</tr>
</tbody>
</table>

\(^1\)All Ns=210
\(^2\)All Ns between 101 and 115

\(SD\) _females_ =1.06, \(t(208)=2.65, p<.01\). Consistent with previous research, males also scored higher SDO (\(M_{\text{males}}=3.05, SD_{\text{males}}=.76, M_{\text{females}}=2.54, SD_{\text{females}}=.83, t(208)=3.91, p<.001\). There was no sex-difference for Left-Right self-identification (\(M_{\text{males}}=3.79, SD_{\text{males}}=1.41, M_{\text{females}}=3.71, SD_{\text{females}}=1.14, t(208)=.42, p=.67ns\). For the general population sample, two of the four variables showed a significant sex-difference: Male scores were significantly more conservative than females scores on the S-6 Conservatism scale (\(M_{\text{males}}=3.76, SD_{\text{males}}=.56, M_{\text{females}}=3.48, SD_{\text{females}}=.64, t(109)=2.23, p<.05\), and on SDO (\(M_{\text{males}}=3.13, SD_{\text{males}}=1.06, M_{\text{females}}=2.5, SD_{\text{females}}=.81, t(113)=3.25, p<.005\)). There were no sex differences for Liberal-Conservative self-identification (\(M_{\text{males}}=4.37, SD_{\text{males}}=1.46, M_{\text{females}}=3.90, SD_{\text{females}}=1.35, t(104)=1.66, p=.10ns\) and Left-Right self-identification (\(M_{\text{males}}=4.29, SD_{\text{males}}=1.53, M_{\text{females}}=3.93, SD_{\text{females}}=1.21, t(101)=1.30, p=.20ns\).

An important pre-condition in assessing mediation is that the variables of interest should be intercorrelated (Baron & Kenny, 1986). In both samples, sex, SDO and S-6 Conservatism scores were significantly intercorrelated, as were the three measures of ideological position (S-6 Conservatism, Liberal/Conservative and Left/Right self-identification). In the student sample (but not the general population) sex was also correlated with Liberal/Conservative self-identification. Similarly, SDO was significantly correlated with both measures of ideological self-identification, while this was only true for Liberal/Conservative self-identification in the general population sample.

Table 2 shows that in both samples, once SDO is added to the regression equation, the regression coefficient for sex (previously significant) becomes non-significant. In order for such a change in magnitude to indicate mediation, the change in magnitude must be tested for significance.

The results reported above were submitted to MedGraph (Jose, 2004) – an algorithm for evaluating the level of significance (if any) of changes in regression coefficients. The change in coefficient was significant (Student sample: Sobel’s \(z=-3.52, p<.001\); General population sample: Sobel’s \(z=-2.65, p<.01\)), and indicated that the relationship between conservatism, SDO and gender, results were analysed using Baron and Kenny’s (1986) steps to mediation procedure. As well as the expected sex difference, the primary variables (sex, SDO, and S-6) all intercorrelated significantly, meeting Baron and Kenny’s (1986) initial criteria for assessing mediation. The same was not found consistently for sex, SDO, and the two single-item measures of ideological self-identification, and therefore mediation was only assessed for the S-6. In order to assess for the presence and nature of mediation, several regression analyses were performed. Firstly, S-6 conservatism scores were regressed onto sex (as a first block) and SDO (as a second). The resulting regression produced a Multiple-\(R\) of .52 for the student sample and .45 for the general population (corresponding \(R^2\)-adjusted of .26 and .19), and were both significant (\(F_{\text{STUDENT}}(2,207)=37.77, p<.001; F_{\text{GEN.POPULATION}}(2,108)=13.84, p<.001\)).

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<table>
<thead>
<tr>
<th>Block 1</th>
<th>B(SE)</th>
<th>(\beta)</th>
<th>Block 2</th>
<th>B(SE)</th>
<th>(\beta)</th>
</tr>
</thead>
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<tr>
<td>Sex</td>
<td>-.18 (.08)</td>
<td>-.15*</td>
<td>Sex</td>
<td>.01 (.07)</td>
<td>.01ns</td>
</tr>
<tr>
<td>SDO</td>
<td>.32 (.04)</td>
<td>.52**</td>
<td>SDO</td>
<td>.28 (.06)</td>
<td>.42***</td>
</tr>
<tr>
<td>Constant</td>
<td>2.63***</td>
<td>-</td>
<td>Constant</td>
<td>3.02***</td>
<td>-</td>
</tr>
</tbody>
</table>

\(\ast = p<.05, \ast\ast = p<.01, \ast\ast\ast = p<.001\)
relationship between sex and S-6 scores was fully mediated by Social Dominance, as predicted. Figure 1 represents these mediational relationships.

**Discussion**

As with previous studies, these analyses show that males were consistently more conservative (as measured using the S-6 Conservatism Scale, with the same general trend for the single-item indices), and scored higher on SDO in both samples. As expected, SDO mediated the sex differences in conservatism, suggesting that SDO might be a mechanism through which sex influences conservatism. Sex significantly accounted for variations in SDO, and variations in SDO significantly accounted for variations in conservatism. Previous research has found consistent relationships between gender, SDO and conservatism (Pratto et al., 1994; Pratto et al., 1997; Sidanius & Liu, 1992), and the current study extended such findings by demonstrating that SDO fully mediates the effects of gender on conservatism. While gender has an effect on SDO, participants differed in conservatism only to the extent that they differed in SDO. Although men overall scored higher on SDO than women, it can be speculated that women who do score highly on SDO should be just as conservative as men with high SDO, which would be consistent with Wilson and Liu’s (2003) finding that gender-disidentified women tended to score similarly on SDO to gender-disidentified men.

As well as supporting the hypothesis that SDO might be the mechanism through which sex relates to political attitudes, there are several other noteworthy results. Firstly, the single-item indices of left-right and liberal-conservative self-placement were strongly, in Cohen’s (1988) terms, inter-correlated in both the student and general population samples (r’s=.45 and .60 respectively, p’s<.001), and in turn were both strongly correlated with scores on the multi-item S-6 Scale (r’s between .39 and .55, p’s<.001). SDO was also correlated approximately equally with the two single-item measures in the student sample, but not as notably in the general population, though the sample was also smaller as well. In fact the only divergent finding was that sex, while unrelated to left-right self-placement, tended to be associated with increasingly conservative self-identification. This supports previous argument in New Zealand that left-right and liberal-conservative are not simply alternative ideologies could be adopted in order to satisfy motives such as power and dominance. The status quo and preventing those individuals from ascending. As men tend appear to desire social dominance more than women, they may be more likely to adopt a conservative position in order to achieve this. Though SDO is clearly important in this and other contexts, it is not the only construct relevant to political attitudes. Right-Wing Authoritarianism (RWA; Altemeyer, 1981; 1996), the combination of support for legitimate authority, punitiveness, and traditionalism, has also been shown to be consistently related to political preference and attitudes. While there have been consistent reports of sex differences in SDO, the same cannot be said for RWA, but the combination of SDO and RWA has been theorised to provide the foundation for one of the major foci of social psychology – prejudice (Altemeyer, 1998; Duckitt, Wagner, du Plessis, & Birum, 2002; Sibley et al., 2007). It may be the case that, just as SDO and RWA are the ‘dual paths’ that lead to prejudice, there are similar foundations for political attitudes. Such an expectation is consistent with the robust finding that sociopolitical attitudes frequently reduce to two factors (sometimes described as social and economic conservatism: e.g., Eysenck, 1976; Johnson & Tamney, 2001; Lorr, 1951). In the general population sample, SDO was significantly correlated only with Liberal-Conservative (but not left-right) self-identification suggesting that in a more politically developed, or at least experienced, group, the left-right and liberal-conservative labels may not be describing the same set of attitudes. If this is indeed the case, we would suggest that the liberal-conservative distinction might reflect more economic/egalitarian issues, and the left-right distinction more social/traditional issues. We would suggest that the most conservative individuals in
our samples would be those that endorse items reflecting BOTH economic AND social conservatism and, if our theoretical contention is supported in the future, this would support the argument of two overlapping paths to political conservatism – one via SDO, and one via RWA.

Given that political orientations of conservatism (versus liberalism) were found to be predicated upon the desire, or lack of desire, for group dominance over other groups, if this desire changed it could be expected that political orientation would also change. Sibley, Wilson, and Duckitt (2007) tracked SDO and RWA over five months and showed that SDO and RWA varied systematically in relation to perceptions of the environment as a competitive, or dangerous, in the case of RWA, place. One need only look to the shifts in political fortune around the globe to see that electoral fortunes do change, and often in response to salient events – the events of September 11 threatened United States security and hegemony, and thus facilitated the consolidation of Republican conservatism in the United States. To test this proposition will require the collection of panel data on sex, SDO, and political attitudes across time, to evaluate the cross-lagged effects of SDO on attitudes over time, as well as the alternative possibility that SDO is in fact affected by changes in political attitudes. Alternatively, Duckitt and Fisher (2003) have shown that it is possible to influence levels of prejudice by priming RWA, using a social threat-related prime, and it is hypothetically possible to do the same thing with political attitudes through priming SDO.

In conclusion, this study investigated the relationships between gender, SDO, and the political orientation of liberalism-conservatism. As expected, men tended to score higher on SDO, and were more conservative than women. This shows that at least in these two samples there is indeed a ‘gender gap’ in political attitudes in New Zealand and, in addition, that SDO was shown to mediate this relationship in both the student and general population sample. While the full extent of SDO’s influence is still to be determined, these findings, for conservatism at least, imply that SDO is highly influential in the political arena and accounts for the major part of the gender gap in politics.

Acknowledgements

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References


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