

# Reexamining the Gender Gap in Ideology

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## Abstract

Since the 1990s we have seen a growing ideological gap between men and women. But while women tend to hold more liberal positions than men on most (but certainly not all) policy issues, it does not appear that men's and women's opinions are becoming more polarized. This presents a puzzle: if ideology is, at least to some extent, a construct based on policy opinions, why do we see a growing gender gap in ideology but not one in issue opinions? We test two different theories of the gender gap in ideology. First, utilizing Item Response Theory (IRT), we assess whether men and women differentially connect their issue preferences to a left-right ideological orientation and whether men and women with the same latent ideology have different probabilities of supporting public policies. Second, we examine whether men and women differ in the degree to which they base their self-reported ideology on a policy-based ideological construct. We find that the puzzle presented by the gender gap in ideology is not explained by gender differences in patterns of ideological constraint; rather, it is the degree to which men and women connect their policy-based ideology to the ideological label they choose for themselves.

## Introduction

With Hillary Clinton's historic run for the Democratic nomination and Sarah Palin on the Republican ticket, the 2008 presidential campaign has reignited attention to gender gaps in political behavior. During the 2008 presidential and vice presidential debates, CNN tracks the reactions of viewers in real time. As viewers react positively and negatively to the debate, two lines travel up and down across the bottom of the screen. One line is red and the other blue, but not for Democrats and Republicans. The lines are for men and women, implying an intuition that the sexes are fundamentally different in the way they think about politics.

Since 1980, when the gender gap in presidential voting first emerged, scholars have taken notice of gender gaps in vote choice (Chaney, Alvarez, and Nagler 1998; Cook and Wilcox 1991; Kanthak and Norrander 2004), presidential approval (Gilens 1988), issue preferences (Fite, Genest, and Wilcox 1990; Klein 1984; Howell and Day 2000; Sapiro 2002; Shapiro and Mahajan 1986; Smith 1984), and partisanship (Kaufmann and Petrocik 1999; Kaufmann 2002). In 2004, Voter News Service (VNS) polls indicated that women voted for John Kerry by a margin of

51-48, while Bush carried men 53-43. In the previous two presidential elections, 1996 and 2000, the gender gap in vote choice had been even wider.<sup>1</sup>

While the gender gap in vote choice first appeared as issue preferences drew men away from the Democratic Party at a faster rate than women during the 1980s (Kaufmann and Petrocik 1999; Wirls 1986), since the 1990s we have seen a growing ideological gap between men and women (Norrander 1999). Examining the 2000 presidential election, Kanthak and Norrander (2004) find that self-reported ideology had the most sizable impact on the gender gap with women identifying as less conservative and weighting ideology more heavily than men. But, while women tend to hold more liberal positions than men on most (but not all) policy issues, it does not appear that men and women's opinions are becoming more polarized Kaufmann (2002). This presents a puzzle: if ideology is, at least to some extent, a construct based on policy opinions, then why do we see a growing gender gap in ideology but not one in issue opinions?

Men and women must be connecting issues to ideology in different ways, and they could be doing that through one of two processes. First, it may be that when constructing their ideology women and men differ in the weight they give to each issue. We know that women and men tend to politicize their issue preferences in different ways (Chaney, Alvarez, and Nagler 1998; Gilens 1988; Kaufmann and Petrocik 1999; Kaufmann 2002; Welch and Hibbing 1992). But few studies have tested specifically whether men and women differ in how they connect issues to ideology.

There is some evidence that they do. In European public opinion data a similar disconnect between issue gender gaps and ideology gender gaps exists: there are gender gaps in issue preferences but not in ideological self-identification. Jelen, Thomas, and Wilcox (1994) investigate this problem and find that European men are more likely to define their ideology in terms of economic issues, while women place more emphasis on cultural issues.

More recently, Norrander and Wilcox (2008) find that a gender gap in ideological identification has emerged in the United States because men have, on average, become more conservative, while women have become more ideologically divided. The authors find that economic policy preferences are consistently weighed more heavily by men than by women, while attitudes on abortion are weighed more heavily by women. And, while both men and women have become more liberal over time in their opinions about a woman's role in society, attitudes on this issue continue to more strongly influence women's ideological identification.

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<sup>1</sup>This trend stands in marked contrast to the early presidential voting studies of the 1950s and 1960s. Neither the Columbia (Berelson, McPhee, and Lazarsfeld 1954) nor Michigan studies (Campbell et al. 1960) noted significant gender differences in policy preferences, partisanship, or vote.

It is also possible that the dissonance between the growth in the ideology gender gap and the relative stability in the issue preference gap is due, not to differences in the weights men and women give to certain issues, but to a difference in the degree to which women and men rely on issues at all when determining their self-reported ideology. Issue preferences are but one ingredient in the mix of ideological identification. Indeed, other research has shown that self-reported ideology is also affected by group positions and symbolic attachments (Jacoby 1991; Conover and Feldman 1981).

In this paper, we test these two theories of gender differences in the construction of ideology, and in the process uncover a picture of gender’s relationship to ideology that is more varied and detailed than its predecessors. To test whether men and women differentially connect issue preferences to an ideological orientation, we treat ideology as a latent trait and estimate it using an *Item Response Theory (IRT)* model. In the following section, we explain this method and its applicability to our question.

## Data and Methods

Prior studies have examined differential weighting of issue preferences by regressing a set of issue preferences on respondents’ self-reported political ideology. Gender gaps are then assessed by comparing regression coefficients in models estimated separately for men and women or by interacting preferences with a dummy indicator for gender. This is the approach taken by Norrander and Wilcox (2008) who find that men place a greater emphasis on social welfare preferences while women weigh cultural issue more heavily. These findings, however, could be the result of the two different processes we discussed in the previous section. First, it could be that ideological constraint is stronger or weaker on different sets of issues for men and women. For example, men’s views on social welfare policy might more tightly align to a left-right continuum than women’s. A second alternative is that men and women differ in the degree to which they rely on an ideological construct when determining their self-reported ideology.

The regression-based approach does not allow us to differentiate between these two processes. Instead, we use IRT to construct a policy-based measure of ideology, with the purpose of more accurately centering ideology on stated issue positions. We believe that this “revealed” policy-based ideology is best suited to analyzing how different issues and issue positions contribute to an overall belief structure. We can then see clearly how this policy-based ideology contributes to self-reported ideology, and whether that contribution differs for men and women.

We utilize survey data from the 2000 General Social Survey (GSS). These data are ideal for our purposes as they include a comprehensive set of policy opinion items repeated over time. A

full list of the policy items as well as the summary statistics for each broken down by gender is provided in the appendix.

## Item Response Theory

We begin our discussion here by invoking Martin Gilens, who in his own 1988 article on gender and ideology noted that his questions were simple, but his method necessarily complex. Our question is certainly simple: why do we not see gender gaps in ideology and issue preferences moving together? In order to test the two theories we put forth to resolve this question, we rely on a method that is relatively new to political science. IRT models estimate latent traits by examining response patterns from multiple questions, here policy opinion items. IRT itself is not new, and the properties of these models have been well established by methodologists in the psychometric and education psychology literatures since Frederic Lord popularized the approach in 1980 (Lord 1980). But only recently have political scientists begun to use IRT to measure latent traits (e.g., Treier and Jackman (2008)).

With this method we are able to test hypotheses relating to the first competing theory: that men and women weigh specific issues differently when determining the policy-based aspect of ideology. The IRT model allows us to test for gender differences in the strength of the attachment between each issue and the latent trait of ideology. But it is superior to traditional factor analytic methods in that it also allows us to test for gender differences in the placement of each issue along a left-right ideological dimension.<sup>2</sup> IRT allows us to assess whether some issues provide more information about the ideology of men or women at different points on the ideological spectrum (Kaplan 2004). For example, the same policy issue might be maximally informative about the ideology of very conservative men, but relatively moderate women.<sup>3</sup>

The IRT model of policy-based ideology we estimate in this paper is multinomial because the policy opinion survey questions we use offer multiple response categories. However, in order to provide intuition about this more complex model, it is useful to explain the most basic IRT model first. In the standard, two parameter logistic IRT model, for items with dichotomous outcomes, the probability of a positive response at a given level of theta ( $\theta$ ) depends on two estimated item parameters, commonly denoted as a ( $\alpha$ ) and b ( $\beta$ ) below.

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<sup>2</sup>IRT and factor analysis share a common rhetorical framework, and in a basic dichotomous models can be estimated using a polychoric correlation matrix using factor analytic methods for one dimensional models Joreskog and Sorbom (1988). IRT is functionally equivalent to factor analysis (Takane and de Leeuw 1987), however, the IRT framework and parameterization are especially useful in extending models such as the graded response in our analysis, borrowing from an established and intuitive taxonomy in psychological measurement (Thissen and Steinberg 1986).

<sup>3</sup>We also note that this approach allows researchers to place survey items from multiple years on the same metric to assess change over time. In this way, researchers can explicitly test whether gender gaps in a particular year are larger or smaller than gender gaps in another. Although not presented here, we are currently extending our analysis to such an over-time perspective.

$$P_i(\theta) = \frac{e^{\alpha_i(\theta - \beta_i)}}{1 + e^{\alpha_i(\theta - \beta_i)}} \quad (1)$$

For each item the threshold or  $\beta$  parameter is the point on the scale of  $\theta$  at which the probability of positive response to the item is .5 – that is a respondent at that level of  $\theta$  will be equally as likely to respond positively as negatively. The discrimination or  $\alpha$  parameter is the logit slope of the function for that item. These parameters define the Item Characteristic Curve (ICC). For illustration purposes, we have dichotomized one of our policy opinion items, support for affirmative action. Figure 1 displays the ICC for affirmative action.

[Figure 1 about here]

IRT models for items with multiple response categories extend this parameterization by estimating a single  $\alpha$  and  $\beta$  parameters for each of the boundaries between categories separately. So, for a dichotomous item, there is only one ICC for the boundary between “yes” and “no,” but in a four category item, there are three curves, one for the boundary between “definitely not” and “probably not,” one for the boundary between “probably not” and “probably,” and one for the boundary between “probably” and “definitely.” In this paper we estimate a Graded Response Model:<sup>4</sup>

$$P_{il}(\theta) = \frac{e^{\alpha_i(\theta_j - \beta_{il})}}{1 + e^{\alpha_i(\theta_j - \beta_{il})}} \quad (2)$$

The  $\beta_{il}$  parameter here for each category is the point on the scale of  $\theta$  at which the probability of responding at or above that category is .5. The  $\alpha_i$  parameter is the logit slope of the function. In Figure 2, we see the boundary curves for the four response categories in the polytomous affirmative action item. Notice that there is a curve for each of the three boundaries between the four possible response categories, and the location of the curve moves to the right as the categories grow more conservative.

[Figure 2 about here]

## Differential Item Functioning

Within this model specification, we can conduct nuanced tests of our first theory: that men and women differ systematically in the ways they connect issues to the policy-based aspect of

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<sup>4</sup>Our estimation of the Graded Response Model DIF uses Marginal Maximum Likelihood (Thissen 2001) using the Bock-Aitken algorithm (Bock 1975). The choice of graded response represents the most simple functional form for polytomous items (Samejima 1969) which represents item characteristics for multiple categories as a series of parallel curves.

ideology. If individuals from different groups (here gender) with the same levels of the latent trait have different probabilities of giving the same response to a question, then the item is said to display Differential Item Functioning (DIF).<sup>5</sup> We look for DIF on both the discrimination and location parameters. Here it is useful to return to our dichotomous affirmative action example. Examine Figure 3. The curves are similar, but not identical. The location of the curve for women is slightly farther to the right, indicating that a woman who is just as likely to oppose affirmative action as to favor it is slightly more conservative than a man with the same probability. The item characteristic curve for women is also noticeably steeper than the curve for men, indicating that this item is more discriminating about the latent policy-based ideology of women than that of men.

[Figure 3 about here]

When we turn to items with multiple response categories, however, the graphic display of DIF through characteristic curves begins to get crowded. With separate boundary curves for each gender for each response category, interpretation becomes difficult. So, for the remainder of the paper, we will present our results in an alternative display: Item Information Functions.

The Information Function helps us display item properties succinctly, summarizing the discrimination and the location parameters, simultaneously depicting item properties. In particular, this function allows us to more easily inspect the slopes and locations for which there are many categories. For polytomous items, the information function is the sum of all item-category information functions where the information function is the square of the inverse of the standard error evaluated across all levels of  $\theta$  and  $P'_i(\theta)$  is the slope of the boundary curve:

$$I_j(\theta) = \frac{[P'_j(\theta)]^2}{P_j(\theta)Q_j(\theta)} \quad (3)$$

Figure 4 displays the item information functions for men and women for the polytomous affirmative action item. The point of "maximum information" is the point the scale of the latent trait at which respondents are equally likely to answer in either of the response categories. Here, we can say that an answer to the affirmative action item provides maximum information about slightly more liberal men and slightly more conservative women. The height of the information function is analogous to the slope of the ICC; here we see that the affirmative action item provides more information about the latent policy-based ideology of women than that of men.

[Figure 4 about here]

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<sup>5</sup>To ascertain the significance of the difference between men's and women's response patterns, we use Thissen's IRTLRFIDIF v2.0b (Thissen 2001). Additional detail on our DIF estimation strategy is presented in the appendix.

In addition to these item parameters, the IRT model also produces estimates of the latent trait, or  $\theta$  for each respondent.<sup>6</sup> In order to test our second theory, that men and women vary in the degree to which they rely on an issue dimension at all in determining their self-reported ideology, we regress self-reported ideology on the IRT estimate of latent policy-based ideology, interacting this estimate with a dummy variable for gender, and controlling for other important covariates. Since we have an ordinal dependent variable, we estimate an ordered probit model. We now turn to the results of these models.

## Results

To examine how the relationships between issues and ideology vary between men and women, we present both a macro-level picture of gender differences drawn from our IRT estimates as well as micro-level assessments of particular public policy issues. We begin with a very simple, global question: do the survey responses on these 35 public policy issues tell us more or less about the latent ideology of men compared to women? In Figure 5 we show the total information functions for men and women, which is the summation of all item information functions. As you can see by the height of both curves, these policy items provide a good amount of information about individuals' latent ideological orientation. The height of the curve is actually higher for women, suggesting that these items provide more information about women's latent ideology, at least at some levels of  $\theta$ . While survey evidence continues to find that men are more politically aware and attentive, we find no evidence that women's responses are *less* ideologically informed than men's.

[Figure 5 about here]

It could still be the case, however, that men and women differ in how they connect issue preferences and ideology on specific public policy questions. We turn to our DIF analyses of each policy item to test whether men and women rely more heavily on different issues when constructing their ideology, and whether men's and women's issue preferences are more tightly aligned with ideology at different points along the ideological spectrum. For example, in the latter case, it could be that views on a woman's role in society are more informative about *conservative* men's ideology but *liberal* woman's ideology. Our methodological approach allows us to explore both types of variability.

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<sup>6</sup>We note that these  $\theta$  estimates are generally preferred to those derived from factor analytic methods. In particular, factor analysis assumes a multivariate normal distribution for all observed variables, which may produce biased estimates when this distributional assumption is not valid such as with ordinal or dichotomous variables (Kaplan 2004).

On the item-by-item analysis, we find few differences between men and women in the degree to which specific public policy preferences discriminate between liberal and conservative respondents. Figure 6 shows each item on a plot of information for men and information for women. Items that fall along the 45 degree line show no gender gap. Note that relatively few items display gender DIF. As such, we do not report the results for all survey items. Indeed, only two policy issues – affirmative action and foreign aid – show statistically significant differences in their discrimination parameters.

[Figure 6 about here]

Recall from Figure 4 in the previous section that preferences about affirmative action provide more information about women’s ideology. We hypothesize that women’s preferences on this issue are more consistently in line with their preferences on other public policy debates while for men such preferences are more strongly influenced by racial attitudes. This is not to say that women’s racial preferences are divorced from their attitudes on affirmative action. Rather, for men, attitudes on this specific issue are not as well explained by their underlying ideological orientation.

The question of foreign aid is also more discriminating for women.<sup>7</sup> In particular, the information function for this item (Figure 7) shows that this question provides very little information about men’s latent ideology. Given that this was the only foreign affairs and defense-related item to display a statistically significant difference in the discrimination parameter, we are hesitant to draw any firm conclusions about these differences. We are currently working on extending our analysis to an over-time perspective, which may shed light on whether this difference is part of a recurrent pattern.

Up until now, we have looked at the strength of connection between issue preferences and latent ideology. On both a global picture as well as an item-by-item assessment, we find little difference in the strength of connection between men’s and women’s preferences on policy and their underlying ideological orientations. We now turn to the question of whether men and women with the same ideological orientation have different probabilities of answering the question in the same way, referred to as location DIF.

[Figure 7 about here]

Here we see more location DIF between men and women, and it tends to be on cultural items. Figure 8 displays the items on a plot of women’s location parameters versus men’s

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<sup>7</sup>Because the height of the information function is defined by the discrimination parameters we use the words “information” and “discrimination” interchangeably.

location parameters. Overall we see more spread around the 45 degree line for the location parameter than the discrimination parameter. But as we discuss in more detail below, we do not find any consistent patterns of difference between men and women. Some issues provide maximum information about more conservative men relative to women while others provide maximum information about more liberal men. Again, we turn to the information functions.

[Figure 8 about here]

Take first the item asking about gun permits (Figure 9). We can see that this item appears to provide more information about the underlying ideology of men than women, though the difference is not statistically significant. But the information function for men is to the left of the curve for women. Opinion about gun permits is most strongly connected to ideology for men who are farther to the left on the ideology scale. A man who is equally likely to favor or oppose gun permits is more liberal than a woman with the same probability.

[Figure 9 about here]

The opposite is true for opinions about pornography law (Figure 10). It appears that this item provides more information about the ideology of women (we will not speculate what other latent construct is driving men's responses), although again the difference is not statistically significant. The location DIF here places this issue farther to the right for men. So, a man who is equally likely to favor or oppose restricting pornography is more conservative than a woman at the tipping point.<sup>8</sup>

[Figure 10 about here]

Finally, examine the information functions for legalizing marijuana (Figure 11). This item also appears to provide more information for women, though the difference is not statistically significant. And the curve is quite a bit farther to the left for men. So, a man who is equally likely to favor or oppose marijuana legalization is more liberal than a woman equally likely to favor or oppose it.

[Figure 11 about here]

Despite interesting gender differences in a few isolated items, the overall story here is one of similarity. Men and women connect individual issues to an underlying left-right ideological construct in much the same way. There is more evidence of DIF in the location parameters. On

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<sup>8</sup>The exact question asked whether respondents favored banning all pornography, restricting it to only those over the age of 18, or not imposing any restrictions at all.

a select number of issues, men and women with the same level of  $\theta$  have different probabilities of providing the same response. While these issues were mostly about cultural policy, there was no clear pattern in the direction of those differences. That leaves us with our second theory, that men and women differ in the degree to which they base their self-reported ideology on such a policy-based construct at all.

We now turn to that question: do men and women weigh their policy-based ideology differently when self-identifying as *liberal*, *moderate*, or *conservative*? Table 1 shows the results of the model regressing self-reported ideology on a set of demographic characteristics, our IRT measure of policy-based ideology, and the interaction between gender and this measure. Although the correlation between our IRT measure and self-reported ideology is modest (0.41), our IRT measure of policy-based ideology has a statistically significant and positive effect on ideological self-identification.<sup>9</sup> Above and beyond policy preferences, we see that church attendance, marriage, and evangelical affiliation increase the probability of identifying more conservatively, while age and education have a liberalizing effect on ideological self-identification. The negative coefficient on the interaction term indicates that policy-based ideology has a stronger effect on men’s ideological self-identification.

To assess the substantive effect of this gender gap, we compare the changes in predicted probabilities of falling into each ideological category for men and women. The columns *Women* and *Men* show the change in predicted probability for each gender moving from a score of -1.74 to + 1.74 on policy-based ideology, holding all other variables constant at their means. This represents shifting from two standard deviations below to two standard deviations above the sample mean on our IRT measure.<sup>10</sup> The column *Gap* shows the difference between the change for men minus the change for women for each category. A positive value for the gender gap indicates that moving from liberal to conservative on our IRT measure has a greater influence on men’s ideological self-identification (as also indicated by the negative coefficient on the gender interaction term). We also see that the gender gap is much larger at the ends of the ideological spectrum (liberal/conservative and extremely liberal/conservative categories).

Thus, while men and women do not differentially connect their policy preferences to a left-right ideological orientation, men do weigh their policy-based ideology more heavily than women when it comes to publicly expressing their ideological identification. We know that there is a disconnect between the gender gaps in ideological self-identification and issue preferences. These findings together indicate that the explanation of this disconnect is not a gender difference in

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<sup>9</sup>Because we have a set of ordered categories we report the polyserial correlation between our IRT measure and self-reported ideology. Higher scores on our IRT measure indicate a more conservative ideology. A comparison of our estimates of  $\theta$  and self-reported ideology is included in the appendix

<sup>10</sup>The mean score in our sample is 0, with a standard deviation of roughly 0.87.

Table 1: Self-Reported Ideology (Ordered Probit)

Female	-0.061	(0.046)
Age	-0.003*	(0.002)
White	-0.037	(0.060)
Education	-0.010*	(0.005)
Coast	-0.002	(0.058)
Rural	-0.100	(0.074)
Income	-0.001	(0.005)
Union	0.035	(0.071)
Married	0.099*	(0.051)
Employed	-0.054	(0.055)
Religious	0.073 * **	(0.009)
Evangelical	0.166 * **	(0.058)
Policy Ideology	0.605 * **	(0.038)
Female * Policy Ideology	-0.184 * **	(0.051)
$\tau_1$	-1.992 * **	(0.137)
$\tau_2$	-1.177 * **	(0.131)
$\tau_3$	-0.741 * **	(0.129)
$\tau_4$	0.427 * **	(0.129)
$\tau_5$	0.977 * **	(0.130)
$\tau_6$	2.114 * **	(0.139)
N	2264	
Log-likelihood	-3519.476	
$\chi^2_{(14)}$	530.439	

\*p<.1 \*\*p<.05 \*\*\*p<.001. All hypotheses tests are two-tailed.

patterns of ideological constraint; rather, it is the degree to which men and women connect their policy-based ideology to the ideological label they choose for themselves.

## Discussion

Our paper began with a simple question: if ideology is, at least to some extent, a construct based on policy opinions, why do we see a growing gender gap in ideology but not one in issue opinions? We tested two different theories of the gender gap in ideology. First, we examined whether men and women differentially connect their preferences to a left-right ideological orientation. Existing studies (Jelen, Thomas, and Wilcox 1994; Norrander and Wilcox 2008) focus on the relationships between particular issue stances and self-reported ideology. We depart from this approach by asking whether the responses to survey questions about public policy debates differ in the amount and type of information they provide about men's and women's latent ideological orientation. Rather than use self-reported ideology, we construct a measure of

Table 2: Change in Probabilities for Self-Reported Ideology

	Women	Men	Gap
Extremely Conservative	0.07	0.13	0.06
Conservative	0.31	0.44	0.13
Slightly Conservative	0.17	0.16	0.00
Moderate	-0.05	-0.06	0.01
Slightly Liberal	-0.15	-0.15	0.00
Liberal	-0.25	-0.33	0.08
Extremely Liberal	-0.11	-0.19	0.08

policy-based ideology, estimated as a latent trait, and test for gender differences in the way men and women connect issue preferences to this latent trait. Since we estimate this latent trait from a set of policy questions asked in the 2000 General Social Survey (GSS), we treat this measure, which we call “policy-based ideology,” as conceptually distinct from self-reported ideology. By looking first at the policy-based component of ideology as a latent trait to be estimated, we take into account the fact that ideological labels do not mean the same thing to all people. Moreover, our IRT approach allows us to test whether men and women differentially connect their issue preferences to a left-right continuum as well as whether issue preferences are more tightly aligned for men or women at different points along the ideological spectrum. In other words, we test whether men and women rely more heavily on different issues when constructing their ideology and whether men and women with the same estimated ideological position have different probabilities of supporting or opposing particular public policies.

Ultimately, we find that men and women do not differ in the extent to which they connect specific issue preferences to an ideological orientation. We do find some evidence that men and women with the same underlying ideology differ when it comes to the likelihood of supporting some public policies. These differences show up more on cultural issue items (e.g., legalizing marijuana, death penalty, and laws regulating pornography), but there is no clear pattern in the direction of these differences. For example, we do not see that men are consistently more liberal (or conservative) than women who hold the same issue position. Moreover, the issues where we do see gender differences are not as politically important; they are neither ranked among the public’s top priorities nor have they held particular sway in deciding recent elections.

We do find evidence in support of our second theory: that men and women differ in the weight they give to policy-based ideology when self-identifying as liberals, moderates or conservatives. So, while men’s policy-based ideology is not more tightly constrained than women’s, it is more strongly linked to their ideological self-identification. To put it differently: gender differences in ideological constraint do not seem to be driving the gender gap in ideological self-identification.

As elite-level ideological polarization has produced mass-level realignments in party loyalties (Abramowitz and Saunders 1998, 2006; Hetherington 2001; Schreckhise and Shields 2003) and strengthened the relationship between ideology and vote choice (Abramowitz and Saunders 1998, but see Fiorina et al. 2008), gender gaps in ideological identification may have significant political implications. Further research should examine whether symbolic attachments as opposed to preferred policy positions are more likely to explain women's ideological self-identities, and whether these findings hold up in other years.

Indeed, our immediate next step is to examine the over-time dynamics between issues and ideology. In particular, we are interested in seeing whether the connections between policy preferences and ideological orientation have grown stronger or weaker as new issues emerge onto the national agenda. And because IRT models allow us to place survey items from multiple years on the same metric to assess change over time, we are able to directly test whether gender gaps in one particular year are larger or smaller than gender gaps in another.

The application of IRT to the puzzle of the gender gap in ideology reveals a richer and more nuanced picture of the way men and women structure their ideology. We believe that this method has potential, not only to further inform our understanding of how men's and women's ideologies differ, but also to uncover similarly detailed information about other politically important traits that cannot be directly observed.

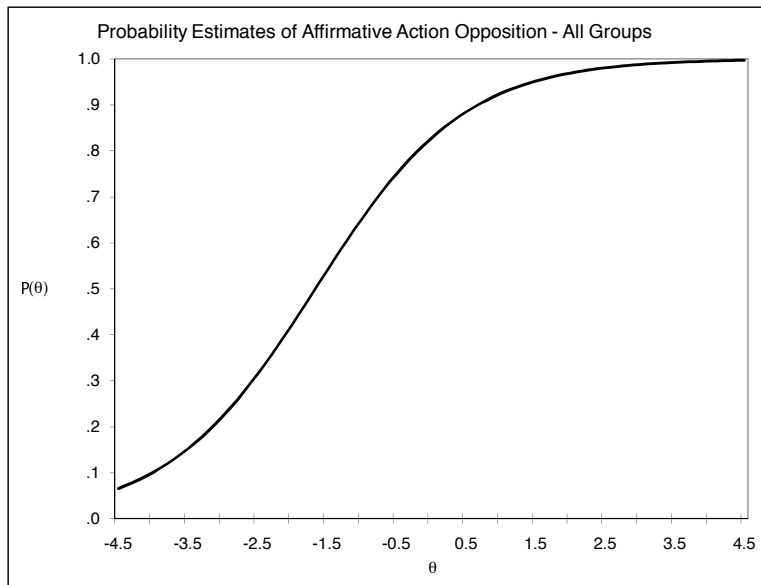


Figure 1: Item Characteristic Curve (Affirmative Action)

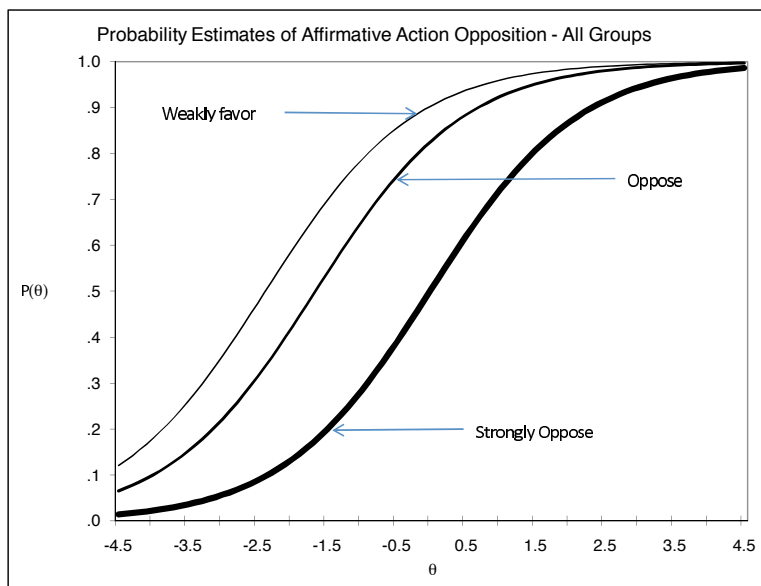


Figure 2: Boundary Curves (Affirmative Action)

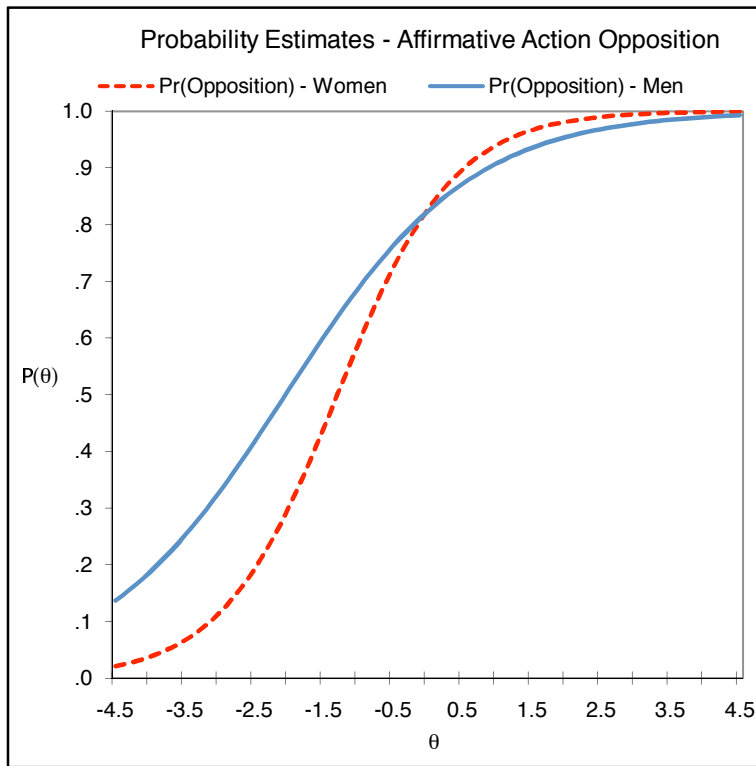


Figure 3: Item Characteristic Curve (Dichotomous Affirmative Action)

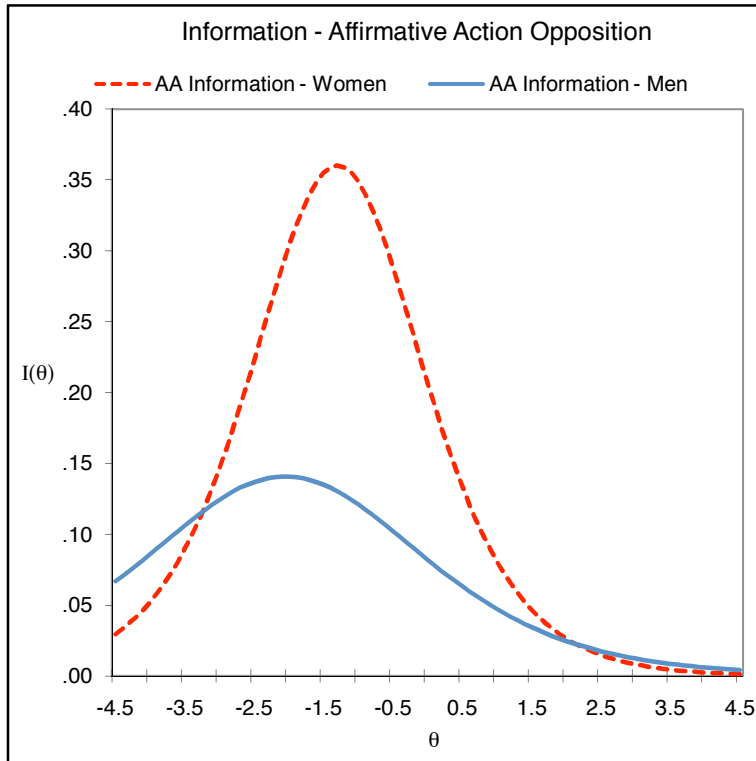


Figure 4: Information Function (Affirmative Action)

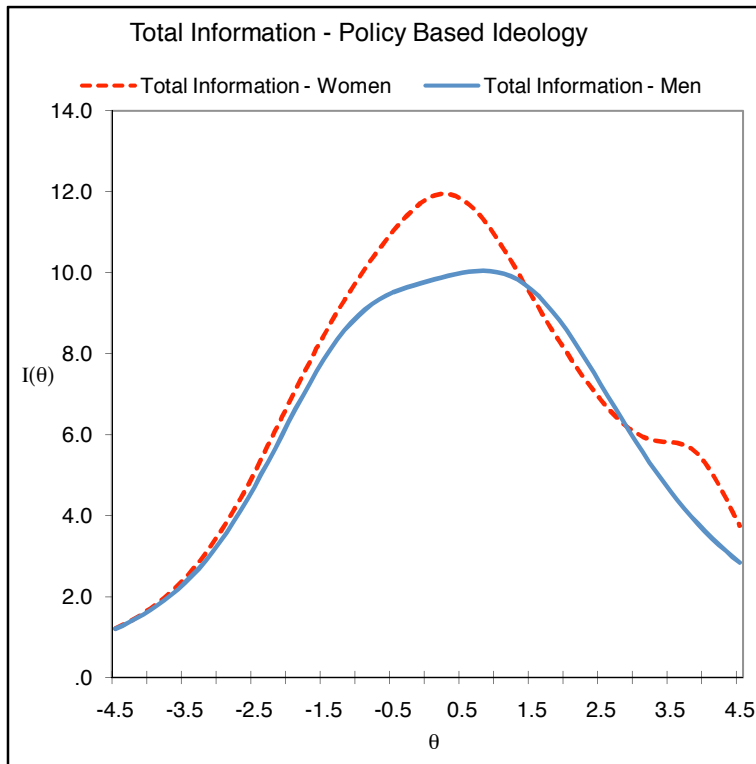


Figure 5: Men vs. Women Total Information

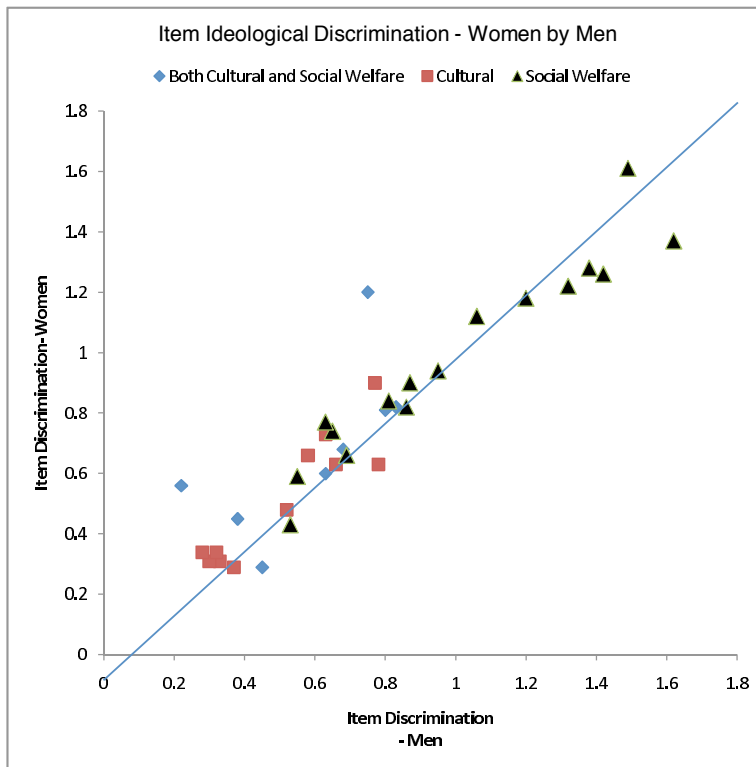


Figure 6: Discrimination (Men vs. Women)

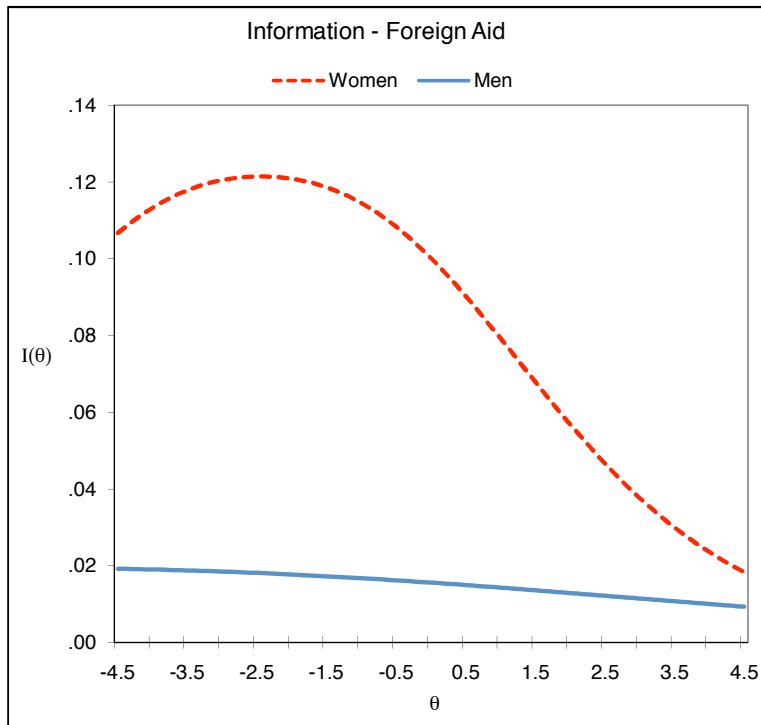


Figure 7: Information Function (Foreign Aid)

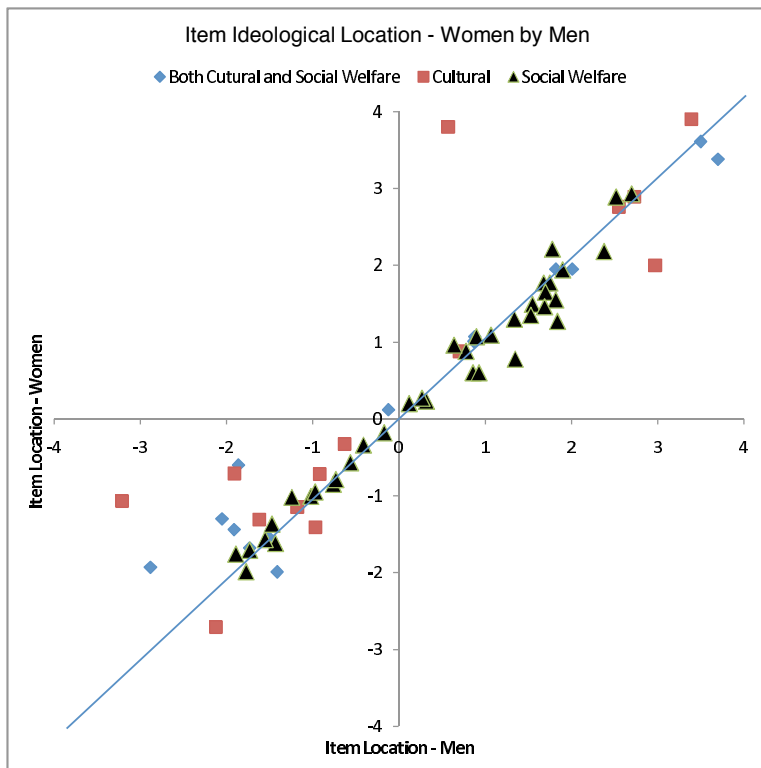


Figure 8: Location (Men vs. Women)

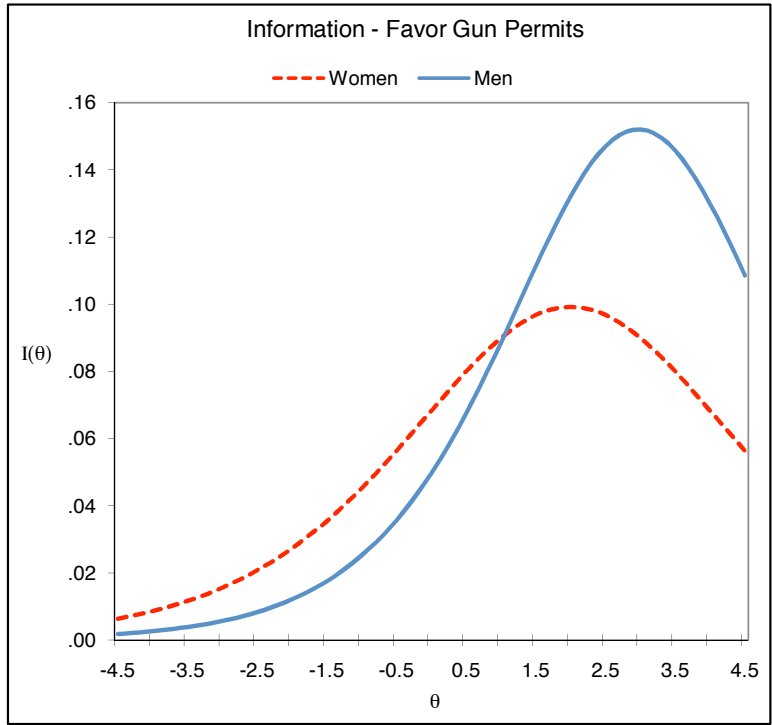


Figure 9: Location Differences on Gun Control

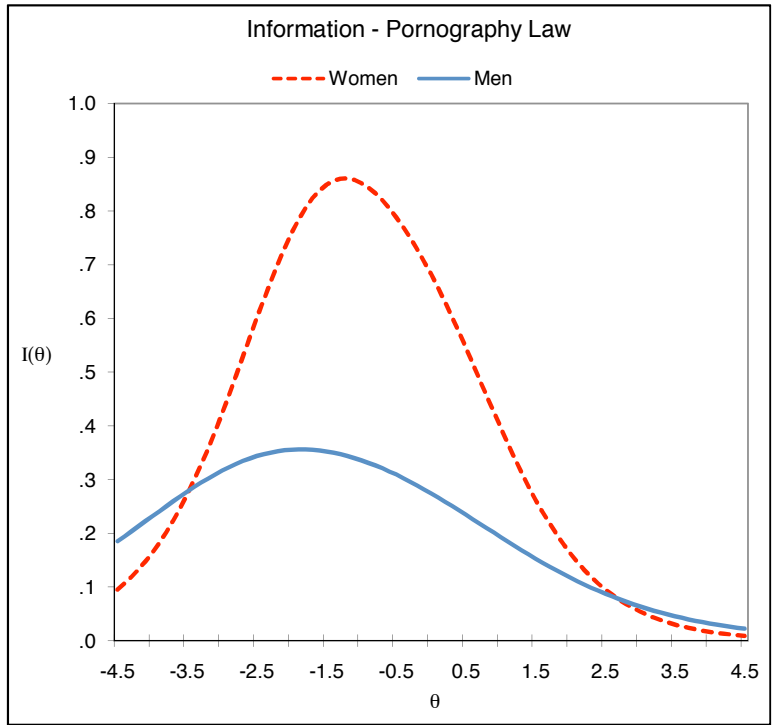


Figure 10: Location Differences on Pornography Laws

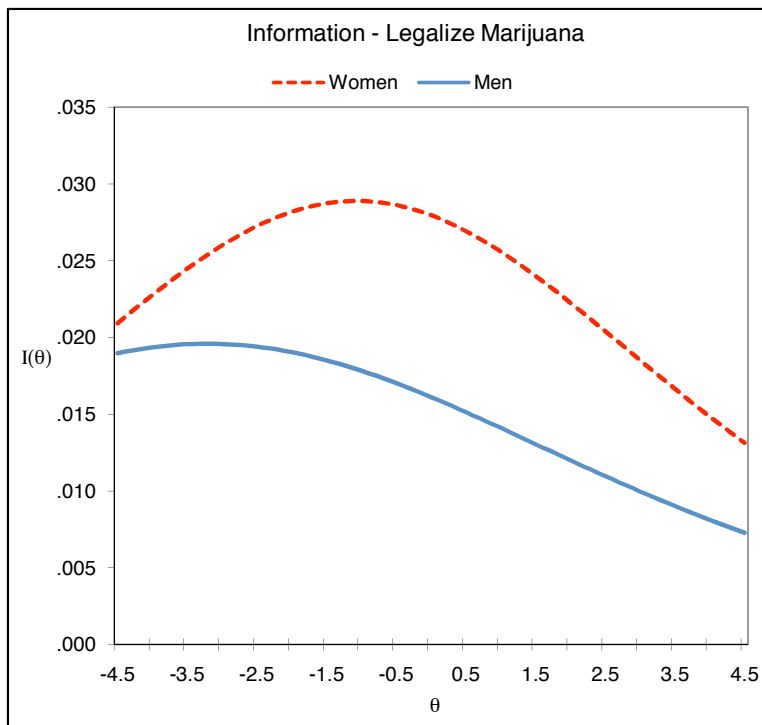


Figure 11: Location Differences on Legalizing Marijuana

# Appendix

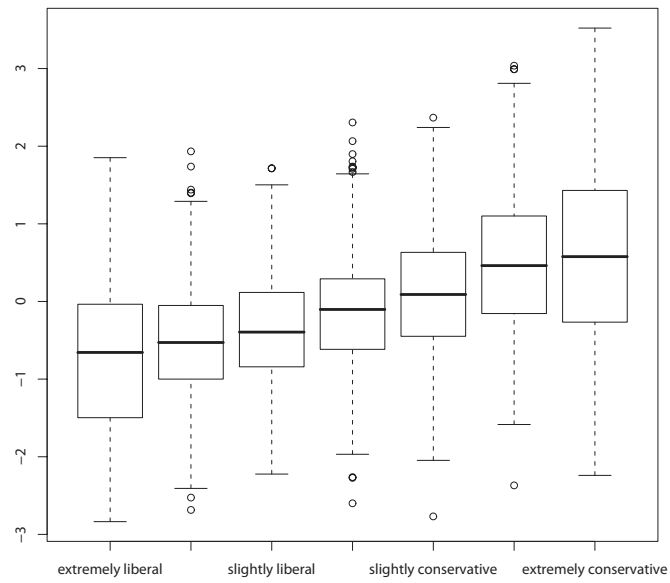


Figure 12: Policy-Based Ideology vs. Self-reported Ideology



Figure 13: Gender Differences on Item Discrimination

Table 3: Summary Statistics for Policy Items

	Women		Men		Range
	Mean	Std. Dev.	Mean	Std. Dev.	
Prayer in school	1.64	0.48	1.58	0.49	1 – 2
Sex education	1.13	0.37	1.12	0.33	1 – 2
Reduce income diff	3.62	1.87	4.08	1.98	1 – 7
Gov't help poor	2.91	1.17	3.12	1.17	1 – 5
Gov't do more or less	3.03	1.18	3.34	1.22	1 – 5
Gov't pay medical	2.31	1.15	2.55	1.22	1 – 5
Gov't aid to blacks	3.36	1.24	3.58	1.27	1 – 5
Improve environment	1.42	0.61	1.49	0.68	1 – 3
Improve nation's health	1.27	0.52	1.34	0.52	1 – 3
Solve problems of big cities	1.56	0.68	1.65	0.71	1 – 3
Improve schools	1.30	0.55	1.36	0.58	1 – 3
Improve condition of blacks	1.74	0.69	1.83	0.72	1 – 3
Foreign aid	2.51	0.66	2.54	0.64	1 – 3
Spend Welfare	2.16	0.77	2.20	0.73	1 – 3
Spend Social Security	1.37	0.55	1.52	0.62	1 – 3
Spend environment	1.40	0.61	1.45	0.65	1 – 3
Spend health	1.30	0.57	1.41	0.62	1 – 3
Spend big cities	1.98	0.76	2.09	0.76	1 – 3
Spend education	1.24	0.72	1.35	0.59	1 – 3
Spend on assistance to blacks	1.81	0.72	1.97	0.77	1 – 3
Assistance to other countries	2.57	0.64	2.62	0.63	1 – 3
Assistance to poor	1.44	0.68	1.51	0.70	1 – 3
Gun permits	1.11	0.31	1.28	0.45	1 – 2
Legalize marijuana	1.70	0.47	1.61	0.45	1 – 2
Abortion if woman's health	1.13	0.34	1.09	0.29	1 – 2
Abortion any reason	1.60	0.49	1.60	0.49	1 – 2
Affirmative action	3.20	1.11	3.26	1.00	1 – 4
Homosexual relationships	2.90	1.36	2.97	1.33	1 – 4
Pornography laws	2.42	0.55	2.21	0.48	1 – 3
Spending military	1.95	0.71	2.21	0.72	1 – 3
Spending national defense	2.00	0.71	2.00	0.75	1 – 3
Death penalty	1.63	0.48	1.75	0.43	1 – 3
Women in politics	1.22	0.42	1.25	0.43	1 – 2
Woman's place in home	2.29	0.93	2.38	0.87	1 – 4
Whites hurt by affirmative action	1.84	0.72	1.86	0.72	1 – 3
$\theta$	-0.10	0.82	0.14	0.92	-2.68 - 3.34

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