Gender and Political Engagement in Comparative Perspective:

Modeling Cross-level Interactions with Multilevel Data

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Abstract

Why do gender differences in political engagement vary dramatically across democracies? We hypothesize that electoral institutions have different effects for men and women's political engagement. Our individual-level data from the World Values Survey and country-level contextual variables yield a multilevel dataset. Past research on gender politics often limits gender to an explanatory variable in survey research. With multilevel data and appropriate statistical techniques we can address the differential effects of contextual variables on men and women. Thus, we move toward integrating the study of gender at the individual level with the study of gendered institutions at the macro-level. In addition, we contrast two approaches to analyzing multilevel data: hierarchical linear modeling (HLM) and clustered standard errors. Given the structure of our data and the expectations generated by our theory, we argue for the simpler approach, clustered standard errors.

Gender, Institutions and Political Engagement: A Comparative Perspective

Gender equality in political engagement poses an enduring challenge for democracies around the world. Despite rising aggregate levels of education, greater workforce participation among women, more egalitarian attitudes towards gender roles, and international movements for gender equality, gender differences in political engagement stubbornly persist in some countries. Why are gender differences in political engagement considerably larger in some countries than in others? Given that engagement with politics is one of the strongest predictors of participation, examining the contextual factors that shape engagement has implications for the policy process and for democratic legitimacy.

The two dominant explanations for gender differences in political engagement, resource and cultural theories, have been unable to account for all of the cross-national variation in men's and women's participation. We argue that a third line of reasoning is necessary to explain gender differences in political attitudes and behaviors – the political context. We focus on the role that electoral institutions play in promoting or hindering political engagement. Drawing on established theories of democratic institutions, we argue that electoral institutions act as symbols and send signals to citizens about the importance of inclusiveness to the democratic process. Where proportional representation and gender quotas promote representativeness and power-sharing, citizens will be more likely to engage in the political process. This effect should be particularly pronounced for women because they have traditionally been excluded from the political process in much larger numbers than men. By the mere nature of women's greater numerical exclusion, electoral institutions that encourage the excluded to engage in politics

should have a larger effect on women's political engagement and narrow the gender gap. In contrast, for men, the macro-level context will exert less influence.

To test the effects of electoral institutions on political engagement, we draw together individual-level responses from the World Values Survey (2000-2002) and contextual variables. The use of individual and country-level data requires multilevel modeling in the statistical analysis. Our theory leads us to expect important cross-level interactions between the respondent's gender and the electoral institutions of the respondent's country. We examine some contentious methodological issues with multilevel data by comparing the results of two different modeling techniques. Some scholars argue that hierarchical linear modeling (HLM) is necessary (Steenbergen and Jones 2002), while others suggest that clustered standard errors may be a more practical approach (Primo et al. 2007). We find few differences between the results of models employing both techniques. Given the structure of our data and our theoretical expectations, we argue that the more practical approach is clustered standard errors.

We also speak to methodological issues in the field of gender politics. The bulk of past research on gender politics at the micro-level limits its conceptualization of gender as an independent variable. A separate line of research argues institutions themselves can be gendered (Kenney 1996). By bringing multilevel analysis to the study of gender politics, we integrate gender at the individual-level with the differential effects of institutions for men and women at the macro-level.

Gender and Political Engagement

Substantial gender differences exist in the United States and cross-nationally in areas of engagement such as political interest, political knowledge, and casting a ballot (Verba, Nie and

Kim; Jennings and Niemi 1981; Beckwith 1986; Christy 1987; Burns, Schlozman and Verba 2001; Inglehart and Norris 2003; Karp and Banducci's 2007). Two lines of reasoning underlie traditional explanations for gender gaps in political engagement—resource-based mobilization (economics and socioeconomic development) and cultural traditions. In their seminal work, Ronald Inglehart and Pippa Norris (2003) argue that perceptions of appropriate roles for women and men in politics are shaped by broader patterns of societal values and priorities, which in turn, rest on economic development and religious traditions. More economically developed and secular countries are associated with more egalitarian gender attitudes. In an earlier study, Margaret Inglehart (1981) highlights the role of religious traditions for shaping men and women's political interest. In predominantly Protestant countries, the gender gap is narrower than in Catholic countries.

While resource-mobilization and culture theories have made important contributions to our understanding of gender differences in democratic engagement, gender differences in political engagement persist even after accounting for economics and culture. Women's aggregate levels of education and workforce participation have increased in many established democracies and the international women's movement has made great strides ingratiating gender inequality into some very women-hostile cultures. Yet, gender differences in political engagement stubbornly endure in many of these countries. Thus, it is necessary to search for additional, and plausibly complementary, explanations for variations in political engagement.

One approach has been to examine the effects of increased numbers of women elected in political office. The bulk of this research has focused on American elections and has yielded contradictory findings. One set of studies in the United States finds considerable evidence that increasing women's representation has symbolic effects on the masses. Together, both Burns,

Schlozman and Verba's (2001) and High-Pippert and Comer's (1998) analyses reveal that women residing in states with more women in visible political offices are significantly more likely to be politically informed, interested and efficacious than their counterparts in states with fewer elected women. Further, these effects are not evident among men. In the 1992 election, Sapiro and Conover (1997) find that women in states or districts with women candidates showed greater engagement than their counterparts living in areas with only male candidates. In state level elected office, women's presence heightens external efficacy among women in the electorate (Atkeson and Carrillo 2007). Atkeson (2003) finds that women candidates must be visible and competitive to significantly affect women's engagement in the election. Similarly, Campbell and Wolbrecht (2006) highlight the importance of women politicians' visibility in the news media for empowering women's participation.

A rival set of studies finds less support for the role of women's numerical representation explaining political engagement in the U.S. Controlling for party congruence between representative and constituent, both Lawless (2004) and Dolan (2006) find little evidence that women's ascension to office encourages political efficacy or activity among women.

In comparative politics, only a few studies have addressed the relationship between women's representation and political engagement. Drawing on surveys of European adolescents, Wolbrecht and Campbell (2007) find that differences in intentions to participate among boys and girls narrow in countries with more women in office. Women's representation appears to have a symbolic effect where female politicians serve as role models inspiring young women to become active in politics. In contrast, however, Karp and Banducci's (2007) study of 29 developing and developed democracies offers little support for a symbolic impact of women in office on mass

participation. Having more women in office also has been linked to stronger perceptions of democratic legitimacy (Schwindt-Bayer and Mishler 2005).

To complement the thinking that political context helps explain political engagement, we suggest that democratic institutions may also be important for understanding gender differences in engagement. Similar to the presence of women in elected office, political institutions can act as powerful symbols sending signals to citizens that encourage greater participation. Although electoral rules have been found to be instrumental in facilitating or hindering women's access to elective office around the world (Duverger 1955; Rule 1981; Norris 1985; Rule 1987; Reynolds 1999; Paxton 2007), political institutions have often been overlooked in explaining gender differences in mass political behavior.

Political Institutions and Visions of Democracy

Prominent theories envision two major categories of democratic institutions – majoritarian and consensus (or proportional) (Lijphart 1999; Powell 2000). A fundamental difference between these two visions is that "democracies are structured differently to allow for different relationships between majorities and minorities" (Anderson et al. 2005, 30). Majoritarian democracies prioritize efficient, accountable majority rule, and consensus-based systems prioritize inclusive representation (Lijphart 1984, 1999; Powell 2000). The democratic ideals underpinning majoritarian systems are the rule of the majority and a concomitant concentration of power in the hands of fewer political actors. Majoritarian systems often employ majority or plurality rules and single member districts. In contrast, the underlying democratic ideals of consensus systems are power sharing and including a wide range of citizens

in the democratic process. Because consensus-based systems aim for broad participation, they often employ institutions such as proportional representation (PR).

The two visions of democracy operate in different ways producing different consequences for the political process, policy decisions, and policy outcomes. For example, Lijphart (1999) contends that consensus democracies yield "kinder, gentler" policies, such as welfare policies, expanded family policies, and more women in the legislature, than majoritarian systems. Similarly, Powell (2000) argues that proportional democracies yield more representative governments promoting greater policy congruence between government and citizens.

Electoral institutions also have consequences for mass attitudes. Citizens in consensus democracies have been found to display greater satisfaction with democracy than citizens in majoritarian democracies (Lijphart 1999; Klingemann 1999). Similarly, PR, multiparty and parliamentary systems create greater support for the legislature among men and women than their majoritarian counterparts (Schwindt-Bayer and Mishler 2005; Norris 1999). Anderson and Guillory (1997) find that a consensual political system ameliorates differences in democratic satisfaction between winners and losers while the multilevel models employed by Wells and Krieckhaus (2006) support the importance of consensus institutions and downplay the influence of economic growth, corruption, democratic longevity and political freedoms. In a study of a broad range of attitudes towards democracy, Christopher Anderson and colleagues (2005) link proportional democratic designs to a narrower gap between winners and losers for evaluations of performance of the political system, responsiveness, fairness and support for democratic principles overall. Further, these effects are both immediate and lasting.

In addition to attitudes, electoral institutions may also shape political participation. Seminal research on voter participation finds empirical support for a relationship between proportional representation and higher turnout (Powell 1986, Jackman 1987). This relationship is theorized to be rooted in potential voters perceiving fewer "wasted votes" for smaller parties, and thus having greater incentive to show up at the polls. Because proportional systems provide more opportunity for representation, scholars of comparative politics long assumed they fostered participation. In a test of this hypothesis, Karp and Banducci (2007) find that PR enhances voter participation by encouraging stronger party preferences and efficacy.

The logic behind these relationships often rests on the costs and benefits that institutions create for voters. Our theoretical framework goes one step further to examine how the *ideals for the democratic process* embodied by institutions affect attitudes and norms of behavior. In this study, we look beyond rationality incentives and focus on the symbolic cues that institutions send to citizens about democracy. Political institutions do more than offer incentives for rational actors; they also socialize citizens into the dominant norms of a country's democracy (Eckstein 1988). Both Powell and Lijphart theorize that majoritarian systems are built upon and offer ideas about majority rule and concentrating power for effective decision making. Consensus systems operate on norms and ideals of inclusiveness, representation, and power sharing.

Gender, Institutions, and Political Engagement

Our key research question is how do electoral institutions influence men's and women's levels of political engagement? We theorize that electoral institutions carry cognitive cues to men and women in society. We posit a process of political socialization in which citizens learn about the ideals and norms of their democratic system through the context of national elections.

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Traditional visions of consensus or majoritarian democracy filter common expectations for gender equality in the political arena. Specifically, politics may be perceived to be more open to the interests of political minorities in proportional systems. Since women historically constitute a minority group, electoral institutions may send informal messages to women about the importance of their participation.

In general, power-sharing institutions should encourage democratic engagement among men and women alike because they diffuse ideals of wide participation in the democratic process. But, we also expect that inclusive institutions will have a larger effect on women's political engagement relative to men's engagement. Women have long been excluded from the political process, and even today in the most developed and culturally progressive societies, women continue to report lower levels of political engagement. Any effect that institutions have will bring that disproportionately large segment of excluded citizens into the political fold. Since women comprise more of that group, proportional institutions should increase their levels of engagement more than men's. This is likely to appear as both a narrowing of the gender gap in political engagement and larger increases in women's engagement in systems with inclusive institutions than the increases we observe for men across types of electoral institutions.

Lijphart and Powell's consensus and majoritarian visions of democratic institutions focus on traditional political institutions such as electoral rules, the structure of executive-legislative relations, and decentralization. We focus on electoral rules, specifically disproportionality, for our investigation of political engagement because of its role in shaping the breadth of groups and interests that will potentially gain representation in parliament.

In addition, another important set of institutions that explicitly target women have emerged on the democratic scene in recent years. Today, almost one hundred countries have

adopted some type of affirmative action rules to increase the political representation of women (Dahlerup 2006). Although early candidate gender quotas were adopted by individual political parties to govern their own nomination procedures, we focus on more recent national-level gender rules. Affirmative action rules in elections loosely fall into two basic forms, quotas mandated by the legislature and reserved seats. The former compel all of the parties in the system to include a specific number of women on party ballots and the latter set aside a certain number of seats at the outset of an election to be contested and filled only by women.

Gender quotas and reserved seats have played an important role increasing the number of women in elective office around the world (Tripp and Kang 2008; Krook 2006), but we argue that, as institutions, they may also carry important symbolic messages for women in society. Gender quotas and reserved seats call for power sharing among men and women in political decision-making. Therefore, in addition to bolstering women's numbers in elected office, these new electoral rules may have a direct impact on the electorate, sending signals of inclusiveness and altering mass attitudes towards the role of women in politics. These effects are likely to be especially pronounced among women because they are aimed specifically at women's inclusion in the democratic process. Gender quotas and reserved seats should both be important for empowering women as democratic citizens and encouraging women's active engagement in electoral politics. Thus, in addition to examining how electoral rules shape men's and women's political engagement, we incorporate gender quotas and reserved seats into the theory and study their effect on gender and political engagement as well.

In sum, we have two primary hypotheses. First, we expect that inclusive electoral institutions will lead to higher levels of political engagement among citizens, regardless of gender. Second, we expect that inclusive institutions will have an interactive effect with gender

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discernible in two distinct ways. First, the gender gap in political engagement should be smaller

in systems with more inclusive political institutions. Second, the smaller gender gap should be a

result of the disproportionately large effect that inclusive institutions have on women's

engagement compared to men's. We test these hypotheses empirically in the remainder of this

paper.

Data and Measurement

We use data from the 2000-2002 version of the World Values Survey (WVS) to test these

hypotheses about inclusive political institutions and political engagement. Because our theory is

based on the symbolic cues afforded by electoral institutions, we test their implications for

psychological engagement, rather than for political activity. Symbolic cues are more likely to

have direct effects on psychological orientations, and indirect effects on activity through the

effects on engagement. Verba, Burns and Schlozman (1997) define political engagement as

"psychological orientations toward politics" and establish that engagement is a critical predictor

of actual participation. We follow Verba, Burns and Scholzman (1997) by focusing on three

measures of psychological political engagement: interest in politics, discussing politics with

friends, and following politics in the news.[1]

These three dependent variables capture distinct dimensions of political engagement.

Political interest captures the broadest dimension of engagement and is likely to be the first step

toward greater engagement in politics. Being interested in politics involves very little effort on

the part of citizens, and in general, will occur before one decides to discuss politics with others

or run for political office. Discussing politics with friends is an expression of one's level of

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[1] VBS also include measures of political knowledge, efficacy and sensitivity to political cues. The World Values
Survey does not include these variables. Karp and Banducci (2007) also use a similar battery of engagement items.

political interest and is not a level of engagement that everyone who is interested in politics will pursue. Thus, it measures a different type of political engagement – an avenue that requires more time, effort, and self-confidence and one that should be much less likely to be pursued by women. Finally, following politics in the news also taps political interest and likely has implications for political knowledge. We measure these dimensions of political engagement with three questions from the WVS that ask about citizens' political interest, political discussion, and following politics in the news. Details on these questions and variables can be found in the Appendix.

Discernible gender gaps exist in political engagement around the world and the size of those gaps varies considerably across countries. Figures 1, 2, and 3 show the gender gaps for political interest, political discussion, and following politics, respectively, for the countries included in our study.[2] Figure 1 shows that the gender gap in political interest ranges from nearly 32 percentage points in Bangladesh to only about one percentage point in Argentina. The gap in the United States is moderate, relative to other countries in the study, reaching nearly 8 percentage points. The gender gap in political discussion displays even wider cross-national variation, as evidenced in Figure 2. The largest gap can be found in India with 38 percentage points, while Sweden boasts virtually no gender gap. In Latvia, women's discussion averages just under a full percentage point higher than men's. Finally, a gender gap is evident in following politics in the news (Figure 3). The gap between men and women in Turkey 22.5 percentage points, but it is less than 2 percentage points in Finland and Malta, and women follow the news more frequently than men in Moldova.

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[2] We include countries for which the World Values Study posed relevant questions and for which we have data on all independent variables included in the regression models below. Thus, the number of countries varies for each dependent variable.

As these figures illustrate, the differences between men's and women's political

engagement are wide. We hypothesize that some of this variation can be explained with the

electoral institutions that countries use. The inclusivity of political institutions could be

measured with an array of institutional variables. Lijphart argues for an eight-part

conceptualization of consensus institutions that includes things such as executive power-sharing,

bicameralism, federalism, multipartism, proportionality of electoral rules, and written

constitutions. Not all of these institutions, however, are relevant for gender representation.

Bicameralism and federalism, for example, maximize geographic representation of regional

interests. As women are almost half of the population throughout most countries, institutions that

promote geographic representation are unlikely to affect women's political engagement. Thus,

we focus on two specific electoral institutions that are most likely to be related to different levels

of political engagement among men and women – the proportionality of the electoral system

(more specifically, its inverse, disproportionality) and gender quotas.

Disproportionality measures the disparity between the percentage of votes that political

parties win and the percentage of seats in the lower or only chamber of the national legislature.[3]

It is a continuous variable such that the larger the disparity, the more disproportional the electoral

system. Proportional representation (PR) electoral systems are the most proportional types of

systems while plurality electoral rules yield the most disproportional votes/seats ratio. To

measure gender quotas, we create two dichotomous variables for whether or not a country has

electoral gender quotas and whether or not it has reserved seats gender quotas (Dahlerup 2006).[4]

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[3] We use the least squares index of disproportionality from Gallagher and Mitchell (2008). Most of the data was available from http://www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/Docts/ElectionIndices.pdf, and we supplemented this with our own calculations for countries that were not included in Gallagher and Mitchell's dataset.

[4] By default, not having a gender quota of either type is the excluded category in the model.

We control for characteristics of individual respondents and countries' political and socioeconomic environments that have been found to be important in explaining gender differences in political participation in past research (Burns, Schlozman and Verba 2001; Inglehart and Norris 2003). At the individual-level, we control for a survey respondent's age, income level, education, and marital status (WVS 2000-2002). At the country-level, we control for several factors. Level of economic development is the country's GDP per capita logged to decrease skewness in the variable. Level of democracy is the country's combined rating on the political rights and civil liberties scale of political freedoms from Freedom House with all "not free" countries excluded.[5] We include a dummy variable indicating whether the country's dominant religion is Protestant. We also account for the percentage of the country's national legislature that was female at the time the survey was conducted in the country.[6] Detailed information about all of the variables and their sources is included in the Appendix.

Multilevel Modeling

At one level, we have data on individual survey respondents, including their gender, age, income, education, and marital status. At the other level, we have data on the countries in which respondents reside, including a country's level of economic development, level of democracy, representation of women, and political institutions. Combining comparative survey data with national level variables creates estimation problems because it violates standard assumptions of OLS models because the error terms are not independent. Because respondents in the WVS survey share much more in common with fellow citizens than those living elsewhere, standard

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[5] If the combined score is 11 or higher, we exclude the country from the analyses.
[6] This is the percentage of the lower or only chamber that is female.

regression models over-estimate the statistical significance of national level variables by underestimating their standard errors (Steenburgen and Jones 2002).

To account for this and other problems with multilevel data, hierarchical linear modeling (HLM) has been employed to study a wide range of political science topics (Byrk and Raudenbusch 1992; Kedar and Shively 2005). Originally developed in the context of educational research, HLM models were often employed where the structure of the data included many panels and a moderate number of observations within each panel (Byrk and Raudenbusch 1992). HLM models require researchers to make a number of assumptions about the distribution of error terms that eliminate the problem of correlated error terms and produce more valid (and sometimes radically different) results.

Although HLM models are increasingly used in political science research, we must employ them in a thoughtful and cautious manner (Steenburgen and Jones 2002: 234; Jusko and Shively 2005: 339). HLM has a couple of disadvantages for our study. The first downside is that we have a relatively small number of panels. With the World Values survey, we have a maximum of 51 panels, the number of countries in the survey. For some of our dependent variables the number is much smaller as not all questions are asked in all countries. In HLM models, degrees of freedom apply to the second tier (contextual variables), and one needs more macro units than macro variables. Second, HLM allows researchers to determine the extent of the variation at the various levels and allows estimation of slope-varying covariates. We do not, however, have reason to expect our covariates to vary by country other than as an interaction with specific characteristics of countries. Finally, HLM models are computationally intensive. Without a strong need for the assets of HLM, that intensiveness is overkill.

An alternative approach is to utilize regression models with clustered standard errors as recommended by Primo et al. (2006) and Franzese (2005). These models also eliminate correlation in the error term but do so by clustering the standard errors around the macro-level variable, in our case the country. The downside of clustered models, however, is that they do not allow researchers to say anything about the nature of the error terms or determine just how much variance is explained at the macro and micro levels. They also only work with two-level data because it is only possible to cluster around one level at a time. That said, these models can be quite appropriate depending on the needs of the study. In our study, we have only two levels of variables and clustered models are a viable option. As we will show below, HLM and clustered models produce very similar results.

The Effects of Inclusive Institutions on Political Engagement

This study asks whether inclusive institutions increase political engagement among both men and women. The first column in each of Tables 1-3 present the results of hierarchical linear models (HLM) that estimate the effect of respondent characteristics, country-level contextual factors, and political institutions on the degree of political interest, discussion, and following politics in the news. The second column shows the results of ordered logit models with clustered standard errors for the identical set of explanatory variables. Overall, for each dependent variable, the results of each approach are strikingly similar.

[Table 1]

[Table 2]

[Table 3]

The models show that an inclusive political environment, measured by the proportionality of electoral rules and gender quota rules, has little independent effect on political engagement of citizens, with the exception of reserved seats in the "following politics in the news" model. While somewhat surprising, it may be that the effect of political institutions is confounded by the conditional effects that they have on men and women. Our interaction terms get at this relationship. We interact the political institutions variables and the proportion of women in the national legislature with respondent gender to assess their combined effect on the degree of political interest, discussion, and following politics.

The individual level variables predicting engagement all yield statistically significant coefficients in the expected direction in each of the three models: interest, discussion and following politics in the news. Women are less likely to be engaged in politics than men while older citizens, those with higher incomes and education levels, and married citizens are more likely to be politically engaged. In contrast, our control variables at the country-level, based on established expectations in past research, do not reach statistical significance in any of the three sets of models. Level of economic development, level of democracy, Protestant culture and the degree of women's representation in national legislatures appear to have little effect on political engagement.

We discuss the interactive effects separately for each dependent variable. Table 1 presents the results for political interest. Countries with electoral quotas have citizens with *less* political interest than those with quotas and this effect is not conditional upon the gender of the respondent. The marginal effects calculated and presented in Table 4 show that both men and women are less political interested in quota countries, though this is borderline statistically

significant.[7] While this is counter to our hypothesis, it likely results from the fact that electoral quotas have been adopted recently and in countries that had lower levels of political interest to begin with (Latin America compared to Western Europe). The finding does tell us, however, that quotas have not yet had the symbolic effect of increasing citizen interest in politics to levels greater than those that exist in countries with quotas. Not surprisingly, this might take time.

[Table 4]

The only institution that has different effects for men and women is reserved seat quotas. As Table 4 shows, the interaction term is only significant for women. Women in reserved seat quota systems have greater political interest than those in systems without quotas but reserved seat quotas have had no significant effect on men's levels of political interest. Among the gender and country-level interactions, the coefficient for the interaction between gender and the proportion of women in the legislature is statistically significant in the MLM model, and it nearly reaches significance in the clustered model. However, the marginal effects and conditional standard errors in Table 4 show no statistically significantly effect for the observed values of men ("0") and women ("1").

We employ the same explanatory variables to examine political discussion with friends. Table 2 reports the findings of the HLM and clustered standard errors models. Again, the results are quite similar. The interaction between reserved seats and gender is statistically significant, for both the HLM and clustering models. However, as Table 4 shows, the effect is only significant for men and reserved seats decrease men's levels of political discussion. The interaction between disproportionality and gender also is statistically significant for both models, but computing marginal effects for observed values indicates no effect of disproportionality for women or for men. Finally, the interaction between gender and the country's proportion of

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[7] The marginal effects are calculated from the clustered models.

women in the legislature is statistically significant for the MLM model, and borderline significant in the clustering model. But, again, it does not have effects that vary by gender (Table 4).

Finally, Table 3 presents the results of models explaining following politics in the news. Consistent with the previous model, reserved seat quotas have a statistically significant and negative effect on following politics in the news across the full population. It also has different effects for men and women. Both men and women in systems with reserved seat quotas follow politics in the news less often but reserved seats do have a smaller effect on women than on men. This could indicate some symbolic effect for women, though we do not have pre-quota measures to compare to this. None of the other institutional variables have effects on their own or interacted with gender.

Taken together, the HLM and clustered standard errors models yield consistently similar results. To this point, our discussion of the results has focused on which explanatory variables reach statistical significance. This focus allowed us to compare the HLM and clustered standard errors models. To summarize our conclusions across dimensions of engagement, the direct effect of reserved seats on the entire population is to depress political engagement. However, the conditional effects of reserved seats are to enhance women's engagement, compared with men's. Among the inclusive electoral institutions, reserved seat quotas emerge as the most consistent predictor. Interactions between gender and women in elected office reveal inconsistent results. This differs from what some literature suggests but does match the recent conclusions of Karp and Banducci (2008). Perhaps it is not the numbers of women in office that matter but whether women's presence leads to tangible benefits for women in society in terms of women-friendly policies. We leave that question to future research.

Conclusion

The findings across the three forms of political engagement – interest in politics, discussing politics with friends, and following politics in the news – do not yield clear and consistent conclusions about the relationship between electoral institutions and political engagement. If we were to look only at the statistically significant interaction terms, we might conclude that reserved seats and proportionality in election rules have a differential impact on men and women. Closer scrutiny of the conditional effects, however, reveals that this impact is quite minimal. Similarly, our results do not support the findings of prior research that women in elected office can heighten women's engagement in politics. Neither do cultural and socioeconomic explanations, which are found to be important explanations for cross-national variations in citizens' attitudes and behavior in past research, appear to exert much influence. The lack of importance of these measures in our multilevel analysis is noteworthy considering the success of these variables in macro-level analyses of participation.

Although our theoretical expectations are not supported by this specification of the model, we can draw some conclusions about multilevel modeling. From a methodological standpoint, scholars have argued that the future of comparative multilevel and time-series cross-section research lies with one step approaches that focus on standard errors (Beck and Katz 1995; Beck 2005). We concur. Because the HLM and clustered error models yield such similar results in our analyses and each yield the information necessary to test our theoretical expectations, we argue for the use of the simpler approach – clustered standard errors. The results of our comparison support the findings of Primo et al. (2007) in making the case for clustered errors. Clustering allows us to test the substantive effects of country-level variables and to test for several cross-level interactions. HLM models make heavy demands on the data

and work better with more panels (Steenbergen and Jones 2002). Comparativists using surveys often have data with many individual-level observations and few contextual-level variables. At the same time, we often must control for several contextual variables and are motivated by theory to test several cross-level interactions. Under these circumstances, HLM models often fail to converge. From a practical standpoint, clustered errors models are more likely to yield estimations allowing us to examine these important relationships. Clustered errors models are also more practical from the standpoint of being less computationally intensive.

The broader goal of our research project is to bring together two lines of largely independent research in gender politics—survey-based research on the effects of gender on political behavior and macro-level research on the gendered nature of political institutions. By identifying a practical, yet appropriate approach to multilevel data, we hope to inspire future research on gender at the micro and macro levels of politics. Although a rich body of literature links political institutions to participation, the conditional effects of gender are often overlooked. In addition, we make a theoretical contribution to understanding the possible array of causal mechanisms for this link between institutions and participation—the symbolic cues that political institutions send to citizens.

Appendix. Description of Variables

Variable Name	Description	Source
Political Interest	"How interested would you say you are in politics?" Four-point scale from "not at all" interested to "very interested"	World Values Survey, 2000
Political Discussion	"When you get together with your friends, would you say you discuss political matters frequently, occasionally, or never?" Three point scale from "never" to "frequently".	World Values Survey, 2000
Following Politics in the News	"How often do you follow politics in the news on television or on the radio or in the daily newspapers?" Five point scale from "never" to "every day".	World Values Survey, 2000
Age	Continuous variable	World Values Survey, 2000
Gender	0=male, 1=female	World Values Survey, 2000
Education	Lower, middle and upper	World Values Survey, 2000
Income	Low, medium and high	World Values Survey, 2000
Married	0=single, 1=married	World Values Survey, 2000
Disproportionality	Least squares index of disproportionality from Gallagher and Mitchell (2008) for the lower house.	Gallagher; our calculations from election results www.tcd.ie/Political_Science /staff/Michael_gallagher/ Elsystems/Docts/Election Indices.pdf
Women MPs	Percent women in lower house in survey year	Inter-Parliamentary Union www.ipu.org
GDP	Log of GDP per capita in survey year (in constant 2000 US$)	World Development Indicator 2007
Freedom House Score	Combined rating on"political rights" and "civil liberties" All "not free" countries excluded from analyses.	www.freedomhouse.org
Electoral Quotas and Reserved Seats	Dichotomous variable for presence of quotas or reserved seats	Quota database (IDEA and Stockholm University www.quotaproject.org
Protestant Religion	Dichotomous variable where 60% of the population identifies as member of Protestant faith.	Barrett, Kurian and Johnson 2001

Table 1: Explaining Interest in Politics

	MLM	Clustering
Individual-Level Variables:		
Gender	-.738 **	-.690 **
	(.057)	(.109)
Age	.014 **	.013 **
	(.001)	(.002)
Income	.160 **	.126 **
	(.011)	(.034)
Education	.567 **	.585 **
	(.013)	(.036)
Married	.089 **	.114 **
	(.018)	(.029)
Country-Level Controls:		
Logged GDPc	-.011	-.005
	(.071)	(.052)
FH score	-.032	-.037
	(.046)	(.034)
Protestant Culture	.059	.104
	(.231)	(.229)
% Legislature Female	-.002	-.005
	(.012)	(.011)
Country-Level Institutions:		
Disproportionality	-.027	-.020
	(.017)	(.015)
Electoral Quota	-.614 *	-.527 *
	(.289)	(.258)
Reserved Seat Quota	-.123	-.093
	(.516)	(.141)
Gender and Country-Level Interactions:		
Gender * % Legislature Female	.005 **	.006
	(.002)	(.003)
Gender * Disproportionality	.001	-.001
	(.004)	(.007)
Gender * Electoral Quota	.048	.017
	(.056)	(.125)
Gender * Reserved Seat Quota	.545 **	.499 **
	(.109)	(.033)
Constant/Cut (very interested)	-3.485 **	-.187
	(.776)	(.574)
Constant/Cut (somewhat interested)	-1.389 *	1.393 *
	(.765)	(.573)
Constant/Cut (not very interested)	.283	3.405 **
	(.765)	(.582)
Respondent N	52917	52917
Country N	43	43
Country-Level Variance	.233 **	
	(.051)	

*Multilevel Models: Coefficients are 2nd order PQL ordered logit estimates with standard errors in parentheses. Cluster Models: Coefficients are ordered logit estimates with standard errors clustered around country in parentheses. *p<.05, **p<.01.*

Table 2: Explaining Political Discussion with Friends

	MLM	Clustering
Individual-Level Variables:		
Gender	-.644 **	-.550 **
	(.055)	(.114)
Age	.011 **	.012 **
	(.001)	(.001)
Income	.181 **	.159 **
	(.011)	(.032)
Education	.607 **	.637 **
	(.013)	(.035)
Married	.125 **	.107 *
	(.017)	(.041)
Country-Level Controls:		
Logged GDPc	-.075	-.060
	(.061)	(.072)
FH score	.016	-.004
	(.038)	(.032)
Protestant Culture	-.063	-.058
	(.185)	(.186)
% Legislature Female	.007	.002
	(.009)	(.007)
Country-Level Institutions:		
Disproportionality	-.012	-.010
	(.014)	(.014)
Electoral Quota	-.328	-.207
	(.256)	(.190)
Reserved Seat Quota	-.576	-.456 **
	(.462)	(.143)
Gender and Country-Level Interactions:		
Gender * % Legislature Female	.008 **	.007
	(.002)	(.004)
Gender * Disproportionality	-.014 **	-.018 *
	(.004)	(.008)
Gender * Electoral Quota	-.068	-.104
	(.058)	(.079)
Gender * Reserved Seat Quota	.334 **	.295 **
	(.115)	(.045)
Constant (discuss frequently)	-2.924 **	.250
	(.610)	(.710)
Constant (discuss sometimes)	-.123 *	2.945 **
	(.610)	(.682)
Respondent N	61545	61545
Country N	51	51
Country-Level Variance	.187 **	
	(.038)	

Multilevel Models: Coefficients are 2nd order PQL ordered logit estimates with standard errors in parentheses. Cluster Models: Coefficients are ordered logit estimates with standard errors clustered around country in parentheses. $*p<.05, **p<.01$.

Table 3: Explaining Following Politics in the News

	MLM	Clustering
Individual-Level Variables:		
Gender	-.416 **	-.290 **
	(.053)	(.079)
Age	.024 **	.028 **
	(.001)	(.002)
Income	.120 **	.096 **
	(.011)	(.027)
Education	.497 **	.568 **
	(.012)	(.054)
Married	.206 **	.165 **
	(.017)	(.036)
Country-Level Controls:		
Logged GDPc	-.010	.042
	(.075)	(.087)
FH score	.029	.039
	(.047)	(.053)
Protestant Culture	-.101	-.144
	(.229)	(.258)
% Legislature Female	.010	.004
	(.012)	(.011)
Country-Level Institutions:		
Disproportionality	-.013	-.011
	(.018)	(.018)
Electoral Quota	-.299	-.173
	(.317)	(.283)
Reserved Seat Quota	-1.163 *	-1.030 **
	(.570)	(.204)
Gender and Country-Level Interactions:		
Gender * % Legislature Female	.002	-.001
	(.002)	(.003)
Gender * Disproportionality	-.007	-.015 *
	(.004)	(.006)
Gender * Electoral Quota	-.002	-.055
	(.055)	(.106)
Gender * Reserved Seat Quota	.259 **	.230 **
	(.105)	(.029)
Constant (every day)	-2.282 **	.059
	(.756)	(.948)
Constant (several times a week)	-1.408 *	1.423
	(.756)	(.916)
Constant (once or twice a week)	-.774	2.058 *
	(.756)	(.907)
Constant (less often)	.586	2.935 **
	(.756)	(.906)
Respondent N	58036	58036
Country N	53	
Country-Level Variance	.286 **	
	(.058)	

*Multilevel Models: Coefficients are 2nd order PQL ordered logit estimates with standard errors in parentheses. Cluster Models: Coefficients are ordered logit estimates with standard errors clustered around country in parentheses. *p<.05, **p<.01.*

Table 4: Marginal Effects of Country-Level Variables for Men and Women

	Interest		Discussion		News	
	Men	Women	Men	Women	Men	Women
Electoral Gender Quota	-.527	-.509	-.208	-.312	-.173	-.228
	(.264)	(.258)	(.190)	(.201)	(.283)	(.366)
Reserved Seat Gender Quota	-.094	.406 **	-.456 **	-.161	-1.03 **	-.796 **
	(.142)	(.145)	(.143)	(.173)	(.204)	(.214)
Disproportionality	-.020	-.021	-.010	-.028	-.011	-.027
	(.015)	(.014)	(.014)	(.016)	(.019)	(.021)
% Legislature Female	-.005	.001	.002	.009	.004	.003
	(.011)	(.012)	(.008)	(.009)	(.011)	(.012)

Coefficients are logits with conditional standard errors in parentheses.

Figure 1. Gender Gap in Political Interest, by Country
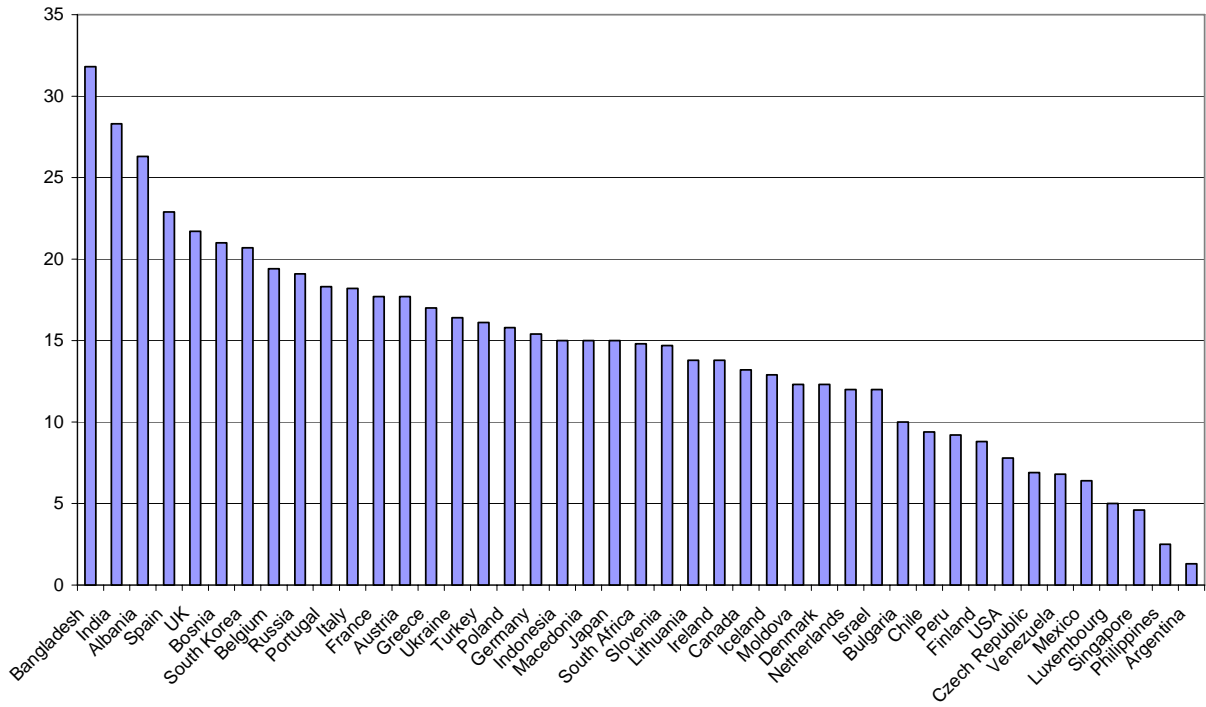**(%men-%women who are "somewhat interested" and "very interested")**

**Figure 2. Gender Gap in Political Discussion, by Country
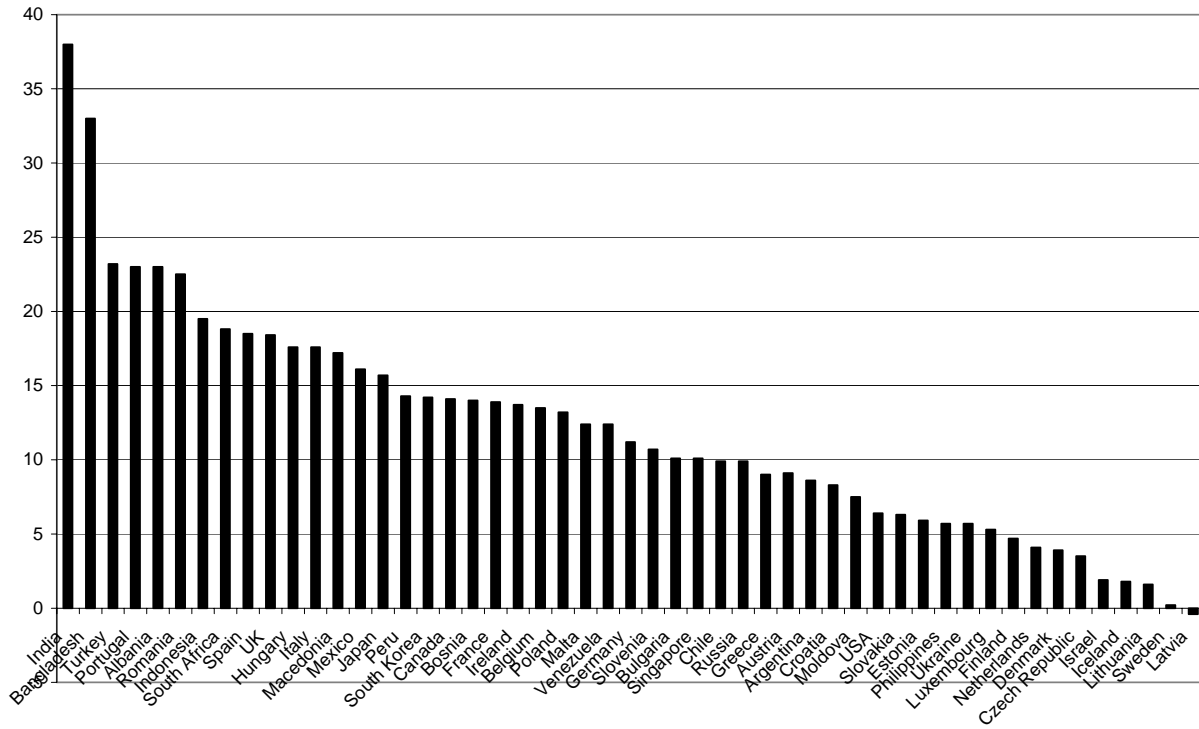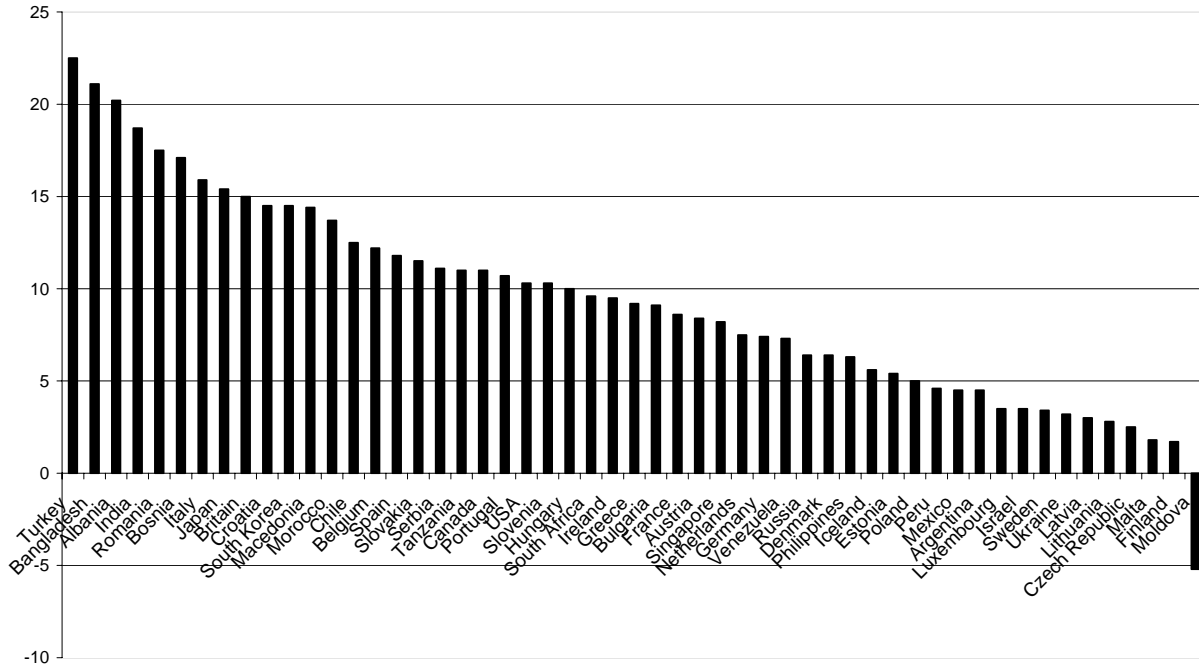(%men-%women discuss "sometimes" and "often")**

Figure 3. Gender Gap in Following Politics in the News, by Country
(%men - %women who follow politics in the news at least several times per week)

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