THE EFFECTS OF ELECTORAL SYSTEMS AND GENDER QUOTAS ON FEMALE REPRESENTATION IN NATIONAL LEGISLATURES

Amy Manning

Abstract

Women make up anywhere from 0% to 56% of the national legislatures around the world. Research has attributed this wide spectrum to political, socioeconomic, and cultural or ideological factors. After testing these existing theories on a sample of 188 countries, this study offers a more comprehensive explanation for this wide variation in female representation. A quantitative analysis of the cases yields four statistically significant factors: type of electoral system, presence or absence of quotas, socioeconomic status, and predominant religion. These factors all affect the proportion of women in a country's legislature. The hypotheses—which posit that type of electoral system and presence or absence of quotas will influence female representation—are supported by the findings. However, this study finds that additional factors also play a significant role in determining female representation and thus suggests avenues for future research.

Introduction

The proportion of national legislature seats currently held by women varies from as low as 0% in some countries to as high as 56% in others. At first glance, the numbers seem surprising, with developing nations like Rwanda taking the lead in female representation while world powers like the United States fall in the middle of the pack. This begs the question: what causes the variation in female representation among the national legislatures of different nations?

AMY MANNING is a student of International Relations.
School of International Service, American University
Email: am1320a@student.american.edu

Clocks & Clouds: Journal of National and Global Affairs, 2013, 4:2, (73-90)
<http://www.american.edu/clocksandclouds/>
HBP Publishing <http//www.hbp.com/>

While many scholars have sought an answer to this question, few have undertaken a comprehensive study seeking a model that could explain the current variation on a truly global scale. This study will attempt to present such a model by applying existing theories to a larger and more representative sample of countries from 2010 to 2013. In doing so, this study aims to provide policymakers and the general public with options for increasing female representation and making national policy a better reflection of its population.

This study argues that political factors—specifically the type of electoral system and the presence or absence of quotas—play the most significant role in influencing a country's level of female representation in the national legislature relative to socioeconomic or cultural and ideological type factors. This study hypothesizes that countries with proportional representation electoral systems and countries with implemented quotas will have a higher proportion of women in their national legislatures than those with majority plurality systems or those without quotas. To test these hypotheses, a regression analysis was conducted with 188 countries in the year 2013.

This study will first discuss the existing literature on the research topic and the diverse theories that have been used to explain the variation in female representation. The second section will present the theory and argument by providing an in-depth theoretical discussion and simplified theoretical models ending with the hypotheses. The third section of this paper will be an overview of the research design, beginning with an introduction of each variable and concluding with a discussion of the cases, observations, and methods. The fourth section, seeks to analyze the results from the multivariate linear regressions. Finally, the last section of this paper will conclude with a discussion of the findings, their limitations, and their implications.

Literature Review

Large quantities of literature have been written on the subject of female representation in politics. However, most of the studies have used female representation as the independent variable and examined the effects of increased female representation on policymaking, political participation, and gender equality. Overall, there seems to have been less focus on what causes variation in female representation among states' national legislatures.

Historically, many of the studies that did address the topic were based on cases of industrialized Western states. Recently, attention has shifted toward non-Western states but there is still little research that attempts to compare variations between Western and non-Western states. In the literature, there

are few comprehensive studies focusing on the variation in the percentage of female representatives of different countries. Therefore, this study aims to address that gap in the literature. Although the existing literature does not offer a complete answer to the proposed research question, it does provide some ideas that are useful in developing this study's explanation for the discrepancy across a large number of countries in recent years.

Based on the literature, there are three main schools of thought to explain differences in female representation in national legislatures: the socioeconomic school, the cultural and ideological school, and the political school. The first two schools fall short in providing an adequate explanation for the variation in the percentage of women in legislatures. Socioeconomic arguments typically advance the claim that developed nations will have higher proportions of women in their legislative bodies. However, data shows that this is not always the case. While culture and ideology undoubtedly have an impact on women's representation in certain countries, it is unlikely that it can provide a universal explanation for the differences among countries. Some countries with cultures and ideologies that would seem to support greater gender inclusive in politics still lag behind in terms of female representation. Although there is no certain consensus, the political school of thought seems to have gained the most support. Because political factors seem the most likely cause of the issue in this study, the political school of thought to will be used to develop this study's approach.

Socioeconomic School

The socioeconomic school contends that states' social and economic conditions, including the level of education, female participation in the work force, and gross domestic product, affect the number of women participating in their national legislatures.

This model has produced mixed results. While some studies suggest a positive correlation between socioeconomics and women's legislative representation, others have found that there is no relationship. A study of women's legislative representation data from 140 countries has suggested that a higher percentage of women enrolled in secondary education and a higher level of economic development are two causes of increased female representation in national legislatures (Adams 2011). Although the study is one of the most comprehensive to date, it could have been improved by including data on the approximately 50 additional countries that were missing. Another study of cross-national female legislative representation found that from 1950

to 2007, the percentage of women in managerial positions which include directors, chief executives, production and operating managers, specialist managers and managers of small enterprises influenced the percentage of women in legislature. As women's professional statuses rose, so did their chances of being elected (Stockemer 2007). However, a flaw of this particular study is that it examined only the 27 EU countries. Thus, the validity of these results would be called into question if applied to another, more diverse group of nations.

Conversely, a separate study showed that none of the social and economic variables examined—education, labor force participation, and economic condition—had a statistically significant impact on women's representation. The socioeconomic argument does not seem to hold up when one considers that a number of developing nations have high female representation rates. In fact, "many developing countries…have much higher rates of representation of women in parliament than do some of the most developed countries" (Yoon 2004, 456).

Cultural and Ideological School

This school suggests that a country's culture and ideology, particularly factors such as religion, egalitarianism, national public opinion, perception of gender roles, cultural heritage, and generational differences influence the proportion of women the country will have in its national legislature. Studies that have analyzed socioeconomic causes also propose that countries in which Protestantism is the dominant religion have higher percentages of women in legislature, whereas predominantly Islamic countries have lower percentages. Other studies have found that Catholicism, Buddhism, Judaism, Confucianism, and Hinduism also tend to result in lower numbers of female representatives (Adams 2011).

Research in this school seems to focus on national attitudes towards gender equality as the reason behind the level of female participation in national legislatures. Studies have found a positive relationship between these two variables, where "egalitarian attitudes toward women leaders influence the proportion of women actually elected to office." The literature has also showed that with each generation, attitudes are shifting toward more egalitarian views, which suggests that we will continue to see an increase in women in legislature (Inglehart and Norris 2001). Similarly, another study done in 2003 used data on gender attitudes in 46 states to establish a link between attitudes and legislative representation. What they found is that negative ideology reduces the proportion of women in legislature by influencing both the supply and demand for female representatives (Paxton and Kunovich 2003).

Yet, with both of these studies, there are some significant outliers that do not fit the gender attitudes explanation. The United States, for example, has generally positive attitudes towards women and women's' rights but continues to lag in terms of female representation in Congress. Examples such as this suggest that national attitudes are not the main cause behind differences in legislative representation. The studies also failed to establish causation, which raises the question of whether positive attitudes lead to higher representation or vice versa.

Other scholars have put forth a similar argument that liberal attitudes towards the role of women should increase the proportion of women in national legislatures. One particular studied established unidirectional causation using nine selected cases—the U.S., U.K., France, Belgium, Denmark, Ireland, Italy, Luxembourg, and the Netherlands (Bergh 2009). For the U.S., the study found that public attitudes affect actual levels of female representation but found no reverse causal effect. For European countries, the results were mixed. In some cases the results were similar to the U.S., while for others it appears that the causal effect occurs in the opposite direction (Ibid.). Most critically, this study is flawed because it does not confirm its argument that high public opinion of women leads to more women in legislature, nor does it provide an alternative explanation. In addition, like many other studies on the topic, the cases selected are limited to Western countries and thus the results may not necessarily apply to non-Western nations.

Looking specifically at Sub-Saharan Africa, scholars have argued that cultural norms and stereotypes on gender roles influence women's running and being elected for office. More specifically, patriarchal culture is a barrier to female political representation. According to this research, patriarchal culture as measured by the prevalence of female genital mutilation impedes women's representation in national legislatures: "how favorably or unfavorably the society views women's involvement in politics depends on where its culture lies in the egalitarian-hierarchical cultural spectrum" (Yoon 2004, 459). In addition to the lack of socioeconomic data available, this study is again confined to one region of the world, which limits its generalizability.

Political School

The political school of thought, which includes theories relating to the presence of internal conflict, type of electoral system, political parties, elite turnover, and implementation of gender quotas, is the most common and seemingly most popular explanation for varying levels of female legislative representation between states.

One political argument is that internal armed conflict can increase female representation in legislature (Hughes 2009). Following conflict, women may outnumber men, unite in coalitions, be more present in the public sphere, seem more reliable, have more organizations supporting their participation, and find political openings where governments have been toppled or politicians pushed out of office. Results show that with each year of internal conflict, women's share of legislative seats rises, especially when that conflict was over government authority (Hughes 2009). However, in some cases, the proportion of women in legislature returns to pre-conflict levels after the conflict ends, so high levels of female representation may only be temporary.

One of the most common explanations for variation in women's representation is the type of electoral system in a country. Many scholars have found support for the claim that multimember proportional representation systems in which the number of seats that a party wins in an election is proportional to the amount of its support among voters are more favorable to women than single-member majority or plurality systems, in which the winner takes all. Analysis of 28 Sub-Saharan nations finds that women's representation is 4.31% higher in proportional representation systems than in majority-plurality systems (Yoon 2004). Additional analysis of 140 states confirms that finding (Adams 2011).

A related argument identifies elite or legislative turnover as a cause of variation. Frequent elite turnover offers better chances for women to gain representation by increasing the number of opportunities they have to enter politics (Hughes 2007). Rates of elite turnover are influenced by the type of electoral system, with proportional representation systems having higher rates than majority-plurality systems. A study using event-history analysis for 153 countries between 1950 and 2000 found that while elite turnover through elections and legislative interruptions can increase women's representation in legislatures, democratic routes are most effective for achieving high levels of female involvement in politics (Ibid.). One problem with this study; however, is that it only examined short-term effects of elite turnover, so the long-term impact on women's representation is not clear.

Another argument claims that scholars need to consider party systems—in other words, whether the system is party-centered or candidate-centered. According to this argument, party-centered systems should translate into higher levels of women's representation because "in systems where elections are based on the personal characteristics of candidates, women may be less attractive candidates" (Thames and Williams 2010, 1581). This hypothesis was tested using a cross-sectional data set of 57 countries between

1980 and 2005, and support was found with party-centered system increasing women's representation by 4.5% (Ibid.). This theory could be improved, however, by applying it to a larger sample of countries, specifically one that includes more cases from Africa, which is underrepresented in the study.

A final argument in the political school of thought is the use of gender quotas. Voluntary party quotas are commonly used with proportional representation systems while reserved or special seats are used in plurality/majority systems. Both types of quotas have become more common in recent years (Bauer 2012). The studies on gender quotas all suggest that a positive relationship exists between quota use and the presence of women in national legislatures. Several scholars have identified quotas as the most significant factor for women's representation. Analysis of seven African countries shows the success of quotas in increasing the proportion of women since their implementation in the 1990s but questions remaining regarding how successful quotas are in other parts of the world (Bauer 2012).

While previous research provides a variety of theories explaining the cause of variation in female representation, there remain gaps in the application of these arguments that render them inadequate for a model explaining the phenomenon. With additional factors considered, the political school of thought may most accurately model this causative mystery. Within the political school, the ability and willingness of a nation's political institutions to engage women provides the most logical explanations for differences in female legislative representation among countries. Since existing literature lacks large-scale and comprehensive application of theories, this study will provide a new platform for examining causes of variation in female representation.

Theory

Theoretical Discussion

A country can be considered capable of including women if it has an electoral system that facilitates women's entry into the legislature. The type of electoral system that is most conducive to women's participation is a proportional representation system. If a country has a proportional representation electoral system, legislators are elected in multimember districts. Political parties are therefore able to list multiple candidates on ballots. When this occurs, parties have an incentive to include female candidates in order to appeal to a larger pool of voters. More women on the ballot provide more opportunities for women to be elected. And when women have a higher chance of being elected,

there will be a higher proportion of women in the country's national legislature.

One way that a country may show its willingness to include women in its legislature is by implementing a quota system requiring that a certain proportion of the legislative body be comprised of women. When countries implement quotas, there are more opportunities for women in government, allowing women to hold positions of political power. When women are seen as leaders and play a positive role in government, there may be a shift in the public's opinions on women in politics. Viewed in this light, they will become more widely accepted in the political sphere, which will lead to an increase in votes for female political candidates in future elections. This will result in a higher proportion of women in national legislature.

Theoretical Models

Proportional representation electoral system »
Political parties have incentive to include women on the ballot to appeal to more voters »
More opportunities for women to be elected »
Higher proportion of women in national legislature

Implementation of quotas »
Requirement that women participate in government »
Women seen in positions of political power »
Shift in public opinions about women in politics »
Acceptance of women leaders »
Increase in votes for female legislators »
Higher proportion of women in national legislature

Hypotheses

The proportion of women in a country's national legislature will be higher if that country has a political structure that incentives female participation and if that country actively works to increase female participation.

H1: Countries with a proportional representation electoral system will have higher female representation in their national legislature than countries with a majority-plurality electoral system.

H2: Countries that have implemented a quota system will have higher female representation in their national legislature than countries that have not implemented quotas.

Research Design

Variables and Data Sources

For the purposes of this study, the dependent variable (DV) is female representation in national legislatures. Representation will be measured by the percentage of women in the lower chamber of each country's national legislative body, which is a continuous measurement. Data will be collected from the World Bank (2012), which provides statistics on the proportion of seats held by women in national parliaments of 252 countries, territories, and regions, and the Inter-Parliamentary Union PARLINE Database (2013), which gives both the proportion and actual number of female legislators for each country.

The independent variables (IVs) assessed in this study are type of electoral system and the presence or absence of a quota system. The ability of a nation to actively involve women is shown through the type of electoral system a country has in place. Certain electoral systems have been shown to be more accommodating to women trying to enter into politics and to give women a better chance of acquiring seats in a legislature. This study will use a nominal measurement with two categories for this variable: proportional representation (PR) system or other. This study will collect data on this variable from the ACE Project: The Electoral Knowledge Network (2013), which offers continuously-updated information regarding the type of electoral system in 234 countries and territories, and Inter-Parliamentary Union PARLINE Database (2013), which provides a more detailed description of each country's electoral system. The data represents the breakdown of women in national legislatures as of November 2013.

The second independent variable used in the analysis, the presence quota system, is defined as whether efforts have been made by a country to increase women's participation. This will be measured by assessing whether the country has implemented a quota system at the national level that requires women to be included in the legislative process. For this nominal measurement, there are two categories: whether the country has implemented a quota at the national level or not. A country is considered to have implemented a quota system if it has a legislated quota, either reserved seats or legal candidate

quotas, or if its political parties have adopted voluntary quotas. Data for this variable will come from the Quota Project: Global Database of Quotas for Women (2013), which lists countries that have implemented quotas and details the type of quotas adopted by each. The data represents the year 2013.

This analysis will include three control variables. Control variables (CVs) will be countries' level of egalitarianism, level of development, and predominant religion. The first CV, egalitarianism within a country, can be defined as the level of support for equality of all groups in society. This study will look specifically at the level of support for gender equality. Anti-egalitarian attitudes toward gender can be expected to keep women from running or being placed on ballots and therefore from being elected, which reduces the proportion of women in a country's legislature. As a measure of egalitarianism, this study will use the acceptance (meaning the ratification, accession, or succession) of the UN Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) as found on the UN Treaty Collection Database (2013). By signing the Convention, a country commits to take measures to put an end to discrimination against women and ensure equality. In theory, acceptance would indicate that a country is supportive of women. This is an ordinal measurement with two categories: support or no support. The data represents acceptance of the treaty as of 2013.

The second CV is the country's socioeconomic condition, meaning the level of development within a country. Development can be measured by a country's gross domestic product (GDP) per capita. Data on GDP per capita will come from UNdata (2011) because the United Nations offers the most complete set of 2011 GDP data. It is expected that countries with higher levels of development, or higher GDP per capita, will have a larger proportion of women in their legislatures. An alternate measure of development would be to examine female enrollment in secondary education or female participation in the workforce. More women would likely have a secondary education or be involved in the labor force in countries with a higher level of development. If females are present in these areas, it is more likely that they are accepted in that country's political system as well. However, because there is limited data available on these measurements, using them would significantly reduce the number of cases included in the statistical analysis. For this reason, the study will instead use GDP per capita as a measure of a country's level of development.

The third CV in this analysis will be religion. Although a country's religious composition can vary greatly, this study will be classifying each country by its dominant religion, or the religion that is practiced by the largest

percentage of the population. Past studies have indicated that Protestant countries have higher levels of female representation. However, because there is a lack of recent data on countries' religious composition at the denominational level, this study will analyze the effect of religion on a country's proportion of women in legislature using the seven major religion headings of Christian, Muslim, Hindu, Buddhist, Jewish, Unaffiliated, and Other. The data on this nominal measurement will come from the Pew Research Religion and Public Life Project (2012), which published a report on the global religious landscape that is accompanied by a table of religious composition by country for the year 2010. It is expected that countries that are primarily Christian to have higher levels of women serving in their national legislature compared to all other religions.

Cases, Observations, and Methods

To test this theory, a large-N quantitative analysis of 188 countries will be conducted using data from recent years (2010-2013). These 188 cases were selected because they have data available on all of the variables this study wished to examine. The cases chosen have shown significant variation in the IVs (the ability and willingness to engage women), the DV (female participation in the national legislature), and the CVs (egalitarianism, development, and religion). Additionally, they have shown significant geographical variation, which will make for a more statistically valid comparison.

This study will make observations of each of the cases in the year 2013. However, for variables for which 2013 data has not yet been collected, such as GDP per capita, the most recent data available will be used. This study will use statistical methods to analyze the data collected on these cases. This will require creating dummy variables for my four nominal variables. Using SPSS, the analysis will look at descriptive statistics to find measures of central tendency, and then run two multivariate linear (OLS) regression models—the first with the two IVs, and the second with the IVs and CVs.

Data Analysis

Descriptive Statistics

The data was analyzed by running descriptive statistics (see Figure 1) to determine the measures of central tendency for each variable. Since the majority of the variables—electoral system, quotas, egalitarianism, and religion—were nominal, mode was the best measure of central tendency. The mode for electoral system was 0, meaning that most countries in the sample

had an electoral system other than PR. For quotas, the mode was 1, meaning that the majority of the countries studied had implemented some form of quota at the national level. The mode for the measure of egalitarianism was 1, which meant that most of the countries in the sample had accepted CEDAW. The mode for the religion variable was 1, which tells us that the majority of the countries in this study were predominantly Christian.

Because the remaining variables—socioeconomic status and female representation—were continuous measures, skewness was used to determine which measure of central tendency was appropriate. Both variables had a positive skew, so the median was the best measure of central tendency. For the socioeconomic variable, the median GDP per capita was $5,339.00. The interquartile range of $13,891 best measures the dispersion for this variable. This measure tells us that 50% of the observed countries had a GDP per capita between $1,511.25 and $15,402.25. For the dependent variable, the median percentage of women in a legislature was 18.45%. The interquartile range of 15 for this variable shows that in 50% of the observations, the percentage of seats held by women was between 11.575% and 26.575%. Both continuous measures could be seen as having considerable dispersion.

Statistics

		PR Electoral System	Quotas at National Level	Ratification, Accession, or Succession of CEDAW	GDP per capita (US$)	Christianity	Proportion of Women in Lower Chamber of National Legislature (%)
N	Valid	188	188	188	188	188	188
	Missing	1	1	1	1	1	1
Mean		.410	.543	.963	15173.590	.670	19.737
Median		.000	1.000	1.000	5339.000	1.000	18.450
Mode		.0	1.0	1.0	5318.0[a]	1.0	.0[a]
Std. Deviation		.4931	.4995	.1898	25461.3950	.4714	11.4594
Skewness		.371	-.172	-4.928	3.408	-.730	.544
Std. Error of Skewness		.177	.177	.177	.177	.177	.177
Range		1.0	1.0	1.0	170261.0	1.0	56.3
Percentiles	25	.000	.000	1.000	1511.250	.000	11.575
	50	.000	1.000	1.000	5339.000	1.000	18.450
	75	1.000	1.000	1.000	15402.250	1.000	26.575

a. Multiple modes exist. The smallest value is shown

Figure 1: Descriptive Statistics

Basic Regression

In addition to a descriptive analysis, a multivariate linear (OLS) regression was used to measure how changes in the two IVs influenced the DV of female representation. This model (see Figure 2) showed support for the hypotheses that countries with PR systems and countries with quotas would have higher proportions of women in national legislatures. The unstandardized

coefficient for electoral system indicates that countries with a PR system have 5.467% more women in their national legislatures. This regression has a p-value of .001, which indicates that the relationship is highly statistically significant and the data can be highly confident that it will hold in the population.

The unstandardized coefficient for the other independent variable suggests that countries with quotas at the national level have 7.103% more women in their legislature. With a p-value of .000, this relationship is found to be significant and the data is confident that it will also hold in the population. Based on the regression's R-square value of .209, it is possible to conclude that the two independent variables account for 20.9% of the variation in female legislative representation among countries. This shows that there are additional variables correlated with the independent variables that must be considered.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.644	1.152		11.839	.000
	PR Electoral System	5.467	1.655	.235	3.303	.001
	Quotas at National Level	7.103	1.634	.310	4.348	.000

a. Dependent Variable: Proportion of Women in Lower Chamber of National Legislature (%)

Figure 2: Basic Regression Results

Complex Regression

In a second regression, both the independent and control variables were analyzed to determine their relationships with the dependent variable. Even after including the control variables, there was support for the two hypotheses. In this regression, the unstandardized coefficient for electoral system denotes that countries with a PR system have 4.030% more women in their legislature. As in the previous regression, this relationship is statistically significant (p-value of 0.018) and the data is confident about finding this relationship in the population. The unstandardized coefficient for quotas shows that countries with quotas have 7.387% more women in their national legislatures. With a standardized coefficient of .322, this variable is shown to have the largest association with the dependent variable. Because the quota variable has a p-value of .000, the data is highly confident that the relationship holds in the population.

Unlike the previous regression, this regression took into account the three control variables, which were egalitarianism, socioeconomic status, and religion. The unstandardized coefficient for egalitarianism (measured by the

acceptance of CEDAW) indicates that countries that have ratified, acceded, or succeeded to the convention have 4.024% more female legislators, but the p-value of .307 renders this relationship insignificant. Because the p-value is so high, the data is not confident that this relationship would hold in the population. Although the results for this variable defied the original expectation that countries that accept CEDAW will have more women in their legislature, the other control variables followed predictions.

The unstandardized coefficient for socioeconomic status (as measured by GDP per capita) suggests that with every additional $1,000 in a country's GDP per capita, there will be .06044% more women in the country's legislature. With a p-value of .043, this relationship is significant and the data is confident that the relationship would hold. The unstandardized coefficient for the final variable, religion, indicates that countries where the majority of the population practices Christianity will have 3.185% more women in legislature. A p-value of .048 reveals the relationship is significant and would hold in the population.

It is possible to interpret this regression's R-square value of 0.252 as meaning that the five variables account for 25.2% of the variation in the dependent variable, which suggests that there are other factors—perhaps culture or history of conflict—that explain the majority of the variation in the presence of women in national legislatures.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.152	3.969		1.802	.073
	PR Electoral System	4.030	1.687	.173	2.389	.018
	Quotas at National Level	7.387	1.613	.322	4.580	.000
	Ratification, Accession, or Succession of CEDAW	4.024	3.925	.067	1.025	.307
	GDP per capita (US$)	6.044E-005	.000	.134	2.041	.043
	Christianity	3.185	1.603	.131	1.987	.048

a. Dependent Variable: Proportion of Women in Lower Chamber of National Legislature (%)

Figure 3: Complex Regression Results

The regression provides insight into the relationship between the independent and control variables and the dependent variable. The hypotheses that PR electoral systems and quotas are both positively associated with female representation in national legislatures are supported by the data. The results suggest that these two variables do influence female representation. Additionally, some of the confounding variables, namely socioeconomic

status and religion, seem to contribute to the proportion of female legislators. While the final variable—egalitarianism—did appear to have a positive relationship with female representation, that relationship was not statistically significant, making it highly unlikely that it is a cause of any variation in female representation among countries. This could be attributed to the weakness of the variable used to measure of egalitarianism. Perhaps with a more accurate measure, like survey data on views towards women, would see a statistically significant relationship between egalitarianism and the DV. However, because this data is not available for a large sample of countries, it was not possible to use it as a measure of egalitarianism for the purposes of this study.

Because the R-square values were low, it is clear that other variables not measured in this study are associated with female representation. Furthermore, given the quantitative methodology and inability to establish a temporal sequence, this analysis was unable to establish causation between the variables examined. This analysis can only state with confidence that correlations exist.

Conclusion

The goal in conducting this research was to explain the variation in female representation between different countries' national legislatures. While research has previously been done on this subject, it has often been limited in its application because of the use of small-N qualitative analysis to examine several observations or large-N quantitative analyses that were unrepresentative of the world's countries. This research was meant to fill the gap in assessing the validity of existing theories by analyzing a more comprehensive sample of countries in recent years.

This study suggested that the type of electoral system and the presence or absence of quotas within countries would be the most significant causes of variation in the proportion of women in countries' national legislatures. More specifically, those countries with a proportional representation electoral system and countries with quotas in place would have higher levels of female representation. After running a large-N quantitative analysis of 188 countries that included several multivariate linear regressions, the data supported both two hypotheses. The presence of quotas resulted in the strongest relationship, increasing female representation by over 7%. Countries with PR systems saw an increase of 4 to 5% in female representation. Some of the confounding variables also seemed to play a role in the number of women in legislature but to a lesser degree than the independent variables. Based on the low

R-square values found in both regressions, it is clear that the variables tested are not adequate in explaining all of the variation in the dependent variable. Additional variation could be a result of other aspects of domestic politics, cultural differences among countries, or history of internal conflict within a country, as proposed by the existing literature. Future studies could shed light on other potential causes, as well as improve on elements of this study by examining causal mechanisms, finding data sources that serve as more accurate indicators of the variables, and collecting data on the few countries that were excluded from this analysis.

The findings from this study have several important implications for theory and policy. First, the data casts doubt on the existing view that attributes varying female representation to egalitarianism. The data does seem to lend support to the claims that socioeconomic status and religion play a role in the level of female representation in legislatures but it best supports past scholarship from the political school of thought.

The results of this study also help to identify some of the factors that allow women to succeed in political office in certain countries. It also identifies some of the roadblocks that may hinder women's success in other countries. This knowledge gives policymakers who are interested in increasing female representation several options for doing so. Yet even if policymakers are not themselves interested in increasing female representation, the general public frequently influences them. When the information from this study is put in the hands of the public, individuals seeking higher female representation may call for change, leading policymakers to implement quotas or alter electoral systems. With higher female representation, legislatures can implement policies that more accurately represent and serve the needs of the entire population, creating a more democratic system.

Female leaders are more understanding and responsive to the needs of women so they are better able to conceive and implement policies that positively impact the lives of women in their country (Bauer 2012). Thus, when this research is applied to national politics, we could see an increase in the number of opportunities for women in legislatures, as well as an increase in the number of opportunities for women in all facets of life as gender and other social issues find a place on the legislative agenda. ¤

Bibliography

ACE Project: The Electoral Knowledge Network. (2013). Electoral Systems [Data set]. Retrieved from http://aceproject.org/epic-en/CDMap?question=ES005&set_language=en.

Adams, Kimberly S. 2011. "Moving towards Gender Parity: Female Representation in National Legislatures, 2001 and 2011." International Journal of Interdisciplinary Social Sciences 6 (3):55-74.

Bauer, Gretchen. 2012. "'Let there be a Balance'." Political Studies Review 10 (3):15p. doi: 10.1111/j.1478-9302.2012.00272.x.

Bergh, Johannes. 2009. "Public Opinion and Representation of Women in National Legislatures: An Analysis of Cause and Effect." Journal of Legislative Studies 15 (1):53-70. doi: 10.1080/13572330802666794.

Inter-Parliamentary Union, PARLINE Database. (2013). Electoral System Module [Data set]. Retrieved from http://www.ipu.org/parline-e/mod-electoral.asp.

Inter-Parliamentary Union PARLINE Database. (2013). Women in National Parliaments [Data set]. Retrieved from http://www.ipu.org/wmn-e/classif.htm#1.

Hughes, Melanie M. 2007. "Windows of Political Opportunity: Institutional Instability and Gender Inequality in the World's National Legislatures." International Journal of Sociology 37 (4):26-51. doi: 10.2307/20628310.

Hughes, Melanie M. 2009. "Armed Conflict, International Linkages, and Women's Parliamentary Representation in Developing Nations." Social Problems 56 (1):174-204. doi: 10.1525/sp.2009.56.1.174.

Inglehart, Ronald, and Pippa Norris. 2001. "Cultural Obstacles to Equal Representation." Journal of Democracy 12 (3):126-140.

Paxton, Pamela, and Sheri Kunovich. 2003. "Women's political representation: The importance of ideology." Social Forces 82 (1):87-113.

Pew Research Religion and Public Life Project. (2012). Global Religious Landscape [Data set]. Retrieved from http://features.pewforum.org/grl/population-percentage.php.

Quota Project: Global Database of Quotas for Women. (2013). Quota Data by Country [Data set]. Retrieved from http://www.quotaproject.org/country.cfm?SortOrder=Percentage.

Stockemer, Daniel. 2007. "Why are there differences in the political representation of women in the 27 countries of the European Union?" Perspectives on European Politics & Society 8 (4):476-493. doi: 10.1080/15705850701640884.

Thames, Frank C., and Margaret S. Williams. 2010. "Incentives for Personal Votes and Women's Representation in Legislatures." Comparative Political Studies 43 (12):1575-1600. doi: 10.1177/0010414010374017.

UNdata. (2011). Per capita GDP at current prices - US dollars [Data set]. Retrieved from http://data.un.org/Data.aspx?q=gdp+per+capita&d=SNAAMA&f=grID%3a101%3bcurrID%3aUSD%3bpcFlag%3a1.

UN Treaty Collection Database. (2013.) Convention on the Elimination of All Forms of Discrimination against Women [Data set]. Retrieved from http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-8&chapter=4&lang=en.

World Bank. (2012). Proportion of seats held by women in national parliaments (%) [Data set]. Retrieved from http://data.worldbank.org/indicator/SG.GEN.PARL.ZS/countries?display=default.

Yoon, Mi Yung. 2004. "Explaining Women's Legislative Representation in Sub-Saharan Africa." Legislative Studies Quarterly 29 (3):447-468.