Fall 12-17-2011

# The Women and Peace Hypothesis in the Age of Nancy Pelosi: Can Female Leaders Bring About World Peace?

Jeannette Haynie
*University of New Orleans*, jhaynie1@uno.edu

"The Women and Peace Hypothesis in the Age of Nancy Pelosi:
Can Female Leaders Bring About World Peace?"

A Thesis

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Master of Arts
in
Political Science

by

Jeannette Gaudry Haynie

B.S. United States Naval Academy, 1998

December 2011

ii

## Table of Contents

# Abstract

The women and peace hypothesis suggests that women are more likely than men to choose peace and compromise over violent conflict, whether as ordinary citizens or as government leaders. I test this concept by analyzing the percent of women in the parliaments and executive cabinets of 93 nations over a 31-year-period, comparing these figures to the presence of violent interstate conflicts for each country-year. Controlling for wealth, democratic status, national capabilities, military expenditures, and contiguity, I find moderate support for the women and peace hypothesis. This support continues when democratic system type is interacted with the measured office. While women do not affect a nation's likelihood of violent conflict to the same degree that other, well-documented predictors do, the effect of women in higher office is nonetheless still significant.

# Introduction

Cindy Sheehan is a California mother whose son, Army Specialist Casey Sheehan, was killed in action in Iraq in April of 2004. She reacted to her son's death by becoming a leading face of the anti-war movement and a household name throughout 2005 and later years. She camped out in protest near former President Bush's home in Crawford, Texas, and acquired the moniker "Peace Mom" (CNN article on Cindy Sheehan of August 2005, accessed May 7, 2011). Code Pink, an anti-war group formed and led by women in response to the 2003 U.S. invasion of Iraq, chose their name as a play on the color-coded U.S. security alerts developed after the September 11, 2001, terror attacks. The group chose pink to represent a call for women and men to fight for peace instead of war since the color pink is often associated with women or feminine attributes (Code Pink website, accessed May 7, 2011). Jeannette Rankin, a Montana Republican, was the first woman elected to Congress in the United States, in 1916. She was an avowed pacifist, and was one of only 50 members of Congress to vote against the entrance of the U.S. into World War I. Twenty-four years later, she cast the lone Congressional vote against the United States' entrance into World War II on December 8, 1941 (Women in Congress website, accessed May 6, 2011; Koch and Fulton 2011).

The idea that women are more pacific than men are is not a new one, and examples of women working and calling for peace are abundant (Gallagher 1993). Throughout history, women have been regarded as peace-loving, nurturing, and opposed to the historically male-dominated notions of war and violence (Caprioli 2000; Caprioli and Boyer 2001; Caprioli 2005; Conover 1988; Gallagher 1993; Melander 2005; Peterson and Runyan 2010; Regan and Paskeviciute 2003; Ruddick 1983). The association of women with peace and pacifism, and the results from that relationship, are known as the women and peace hypothesis. The women and

peace hypothesis has been examined before; research supporting and challenging it is well-represented in political science literature. This hypothesis, as the name suggests, speculates that women are more peaceful and cooperative in conflict situations than men are, and are more likely to seek out a compromise or other alternative solution before resorting to violence (Tessler, Nachtwey, and Grant 1999). This raises a natural question, then: if women held positions of leadership, would the world experience less war as a result? Would greater numbers of female leaders bring us closer to world peace? Remarkably, while the women and peace hypothesis has been examined repeatedly, this specific research question has only been addressed by a handful of scholars (see Caprioli 2000; Caprioli and Boyer 2001; Caprioli 2005; Carroll and Hall 1993; Hudson et al 2008; Melander 2005; and Regan and Paskeviciute 2003). Even less addressed is the question of *why* women might be expected to decrease the likelihood of war and conflict.

Anecdotally, stories of women and peace or women and power run the gamut from Margaret Thatcher, the "Iron Lady" (Thatcher website, accessed August 21, 2011), to Jane Fonda and her peace activism. While the studies dedicated to researching the question of women and peace have found some qualified support for it, in light of the small but increasing numbers of female leaders worldwide, more research is needed to add dimensions to the women and peace hypothesis and to properly identify a causal mechanism. This paper is intended to fill these knowledge gaps and to supplement the existing literature with added research and analysis.

Over the last few decades, scholars have created and expanded upon an impressive knowledge base of gender and conflict, but much is still unknown. This knowledge rests upon the foundation given by gender-based stereotypes and a well-documented gender gap, both of which lend some credibility to the women and peace hypothesis. The hypothesis is rooted in

these stereotypes, and a growing literature on gaps between male and female opinions on a number of different subjects often supports gender-based stereotypes as well as the women and peace hypothesis.

Gender-based stereotypes play key formative roles in societies worldwide, and these stereotypes color every aspect of social interaction. Stereotypes characterize women as gentler, nurturing, and more emotional than men, while men are imagined to be more assertive, aggressive, and even more violent (Huddy, Cassese, and Lizotte 2008; Peterson and Runyon 2010; Tessler and Warriner 1997). Men are aggressive hunters, providers, and leaders, who protect women and families and do not fall prey to their emotions. Women are caretakers, often seen as instinctively maternal and peace-loving (Gallagher 1993). Women need protection, and can be overly emotional (Hudson et al 2008; Peterson and Runyan 2010; Tessler and Warriner 1997). Men commit most crimes, especially violent ones (Fukuyama 1998), while women, being mothers, instinctively care for and protect life (Caprioli 2000; Caprioli and Boyer 2001; Conover 1988; Fukuyama 1998; Huddy, Cassese, and Lizotte 2008; Melander 2005; Peterson and Runyon 2010; Tessler and Warriner 1997). The maternal role carries implications that affect not just social interactions, but everything from female life expectancy to socioeconomic status and everything in between. The idea of motherhood also implies that women instinctively want to care for others, and therefore have a softer, more nurturing, and more forgiving side as compared to men; this concept is the backbone of many politically-based gender stereotypes (Alexander and Andersen 1993; Bystydzienski 1883; Carpenter 2011; Huddy, Cassese, and Lizotte 2008; Peterson and Runyan 2010; Tessler and Warriner 1997).

To tie gender-based stereotypes into conflict theory, we need not look far. Wars are often started by men, fought by men, and won or lost by men. Women nurse the injured, mourn the

dead, and are often the victims of battle. Women as the grieving widows and mothers of fallen soldiers are ubiquitous in national campaigns, and these images are fed by the maternal stereotype (Enloe 2010). While some women participate in war, most women are portrayed as and assumed to be support staff and protesters in the name of peace (Conover and Sapiro 1993; Fukuyama 1998; Peterson and Runyan 2010). Even today, militaries remain predominantly masculine and are still generally led by men (Fukuyama 1998; Peterson and Runyon 2010; Ruddick 1983). Politics is often thought of as a male-dominated field, since characteristics and traits that are viewed as masculine—such as assertiveness, leadership capabilities, and emotional detachment—are also more desirable traits in politicians and officeholders (Alexander and Andersen 1993; Caprioli and Boyer 2001; Koch and Fulton 2011). Characteristics traditionally considered feminine—compassion, emotional expression, and cooperation—are not usually seen as desirable characteristics for a national leader (Koch and Fulton 2011).

Gender-based stereotypes are so universally held that advertising campaigns are built around them, and they encompass most aspects of life from birth until death. Looking at my own family, I see a microcosm of common gender stereotypes: my two daughters are wearing princess dress-up clothes and playing with paper dolls, while my son is wearing a blue shirt with pictures of dump trucks on it and while trying to fit a plastic toy car into his mouth. The impact of gender can often be this obvious; school choices, clothing, hobbies, and careers change when gender enters the equation. Yet other gender impacts are less overt and may be harder to measure, such as the impact of gender and gender stereotypes on public and policy opinions (Conover 1988; Conover and Sapiro 1993; Tessler and Warriner 1997).

The existence of an increasingly well-documented gender gap in policy preferences validates gender-based stereotypes and lends support to the women and peace hypothesis. Men

and women think differently and hold different opinions on a wide range of concepts. Specifically, men and women feel differently about the use of military force, and this opinion gap persists over time, situation, culture, and location (see Eichenburg 2003; Gallagher 1993; Koch and Fulton 2011; Tessler, Nachtwey, and Grant 1999; Tessler and Warriner 1997). Consistently, men choose the option of military force, or show support for it, at a higher rate than women do. Women, conversely, seek out more cooperative solutions when conflict occurs, and exhibit higher rates of concern when military force is applied (Bystydzienski 1993; Conover and Sapiro 1993; Eichenburg 2003; Gallagher 1993).

Gender-based stereotypes support the idea that women would choose more pacific means, or compromise, in a conflict (Bystydzienski 1993); whether accurate or not, most people believe it. The existence of the gender gap on the use of military force lends credibility to the claims that women actually do support more peaceful, cooperative, and compromising policies in conflict situations than men do, and that women support violence and war at a lower rate as well. A natural question would be whether or not women in higher levels of office would exhibit the same preferences and make the same choices. If women are truly more peaceful than men are, the presence of female politicians at the national level could have a pacifying effect on nations, assuming that female politicians behave like their female constituents. If women seek to explore nonviolent options in crisis situations, that could cause a marked decrease in international warfare for nations with more female elected officials.

If the presence of women in higher offices represents a norm shift that would allow cooperative, more peaceful methods to be sought, and peace to be valued and respected more, then this could also cause a decrease in interstate conflict. The norms inherent in democracies

often open up opportunities for women to attain higher office, and these norms are similar to those espoused by mainstream feminist groups (Gallagher 1993; Hudson et al 2008).

Therefore, in my research I ask whether the presence of women in higher national office is associated with a decrease in international conflict. How these women vote, and the policies they support in office, will not necessarily relate to a lower incidence of violent conflict. The mere presence of women in greater numbers, however, could represent a national norm shift that brings about lower rates of conflict.

Past studies have also focused on similar areas, with some support found for the women and peace hypothesis (Caprioli 2000; Caprioli and Boyer 2001; Caprioli 2005; Hudson et al 2008; Koch and Fulton 2011; Regan and Paskeviciute 2003). I will explore the discrepancies between those studies and mine shortly. For this research, I examined all conflicts from 1971 through 2001 that register at or beyond a certain level of violence, using the Militarized Interstate Dispute database 3.1 (Ghosn, Palmer, and Bremer 2004), and analyzed these against the backdrop of female presence at the national level in each nation for each year, specifically examining only nations that achieved democratic status at some point during the 31 years studied. Controlling for standard variables, I asked whether the women and peace hypothesis holds any weight. Do nations that elect or appoint more women to higher national office enjoy a lower rate of interstate conflict than those nations with fewer women in office? From the results I observed, it would seem they do. This affirmative response could add to international dialogue on the peace process and shed some light on the causal mechanism behind the women and peace hypothesis, not to mention the effect such information could have for women as a gender.

# Literature Review

Existing literature provides information on male and female characteristics, desires, and preferences on a wide array of policies and subjects. Traditional and radical views alike have explored gender characteristics hoping to decipher past actions and predict future behavior. The gender gap emerges in many diverse policy areas: men and women hold different opinions about certain subjects, causing a gap between the average male opinion and the average female opinion (Box-Steffensmeier, De Boef, and Lin 2004; Wirls 1986). Abortion rights, welfare, and capital punishment are all policy areas that exhibit a gender gap, as is the use of military force.

Specifically, men favor using force more than women do in many circumstances (Bendyna and Finucane 1996; Caprioli and Boyer 2001; Conover 1988; Conover and Sapiro 1993; Cook and Wilcox 1991; Eichenberg 2003; Fukuyama 1998; Gallagher 1993; Huddy, Cassese, and Lizotte 2008; Shapiro and Mahajan 1986). Women, in keeping with the female attributes espoused by gender-based stereotypes, often prefer looking for alternative resolutions to crises (Wilcox, Hewitt, and Allsop 1996). Bendyna and Finucane (1996) examined male and female Americans' attitudes toward the 1991 Gulf War and found that women were consistently less supportive of hostilities before, during, and after the conflict. Women worried over casualties, felt more emotionally invested, and preferred sanctions to the use of force more than men did every time (Bendyna and Finucane 1996). And this gap did not just appear for the Gulf War: American women were 7-9% less supportive than American men were of World War II, Korea, and Vietnam (Conover and Sapiro 1993, 1079; Fukuyama 1998; Gallagher 1993; Huddy, Cassese, and Lizotte 2008; Tessler and Warriner 1997). The gender gap on the use of military force is not an American phenomenon either (Gallagher 1993). Controlling for demographics and political views, Wilcox, Hewitt, and Allsop (1996) found that nine out of the eleven

countries they studied exhibited a gender gap in preference for military action. Togeby's analysis of Scandinavian nations observed a similar gender gap on the use of force across different scenarios, including non-military options (1994). Smith (1984) observed a large gap between male and female views on overall violence—not just war-related outbreaks—across a large range of issues, and over time.

This fits neatly with most gender stereotypes, and one can predict where it leads: women, being maternal, nurturing, and caretaking, want to preserve life. Gentler, more cooperative options appeal to women when conflicts arise. Therefore, women will likely oppose using force and will seek other means of arriving at a solution in a conflict. The gender gap supports the likelihood of this scenario, and the literature backs up the idea that female presence and feminine attitudes could affect the frequency and/or intensity of international warfare.

A number of theories have been identified to explain the causes of the gender gap, specifically the gender gap regarding the use of force. The most common theories include foreign policy knowledge gaps between the genders, biological and socialization differences between men and women, and socioeconomic factors.

Wilcox, Hewitt, and Allsop (1996) surmised that women may often answer "I don't know" when asked for their opinions on military use or on foreign policy-specific questions, creating a gap from men who *do* have opinions on foreign policy and the use of military force as an option. This could be especially true in developing nations, where women may be less educated than men, more uninformed and more likely to answer "I don't know" to such questions (Gallagher 1993; Togeby 1994; Wilcox, Hewitt, and Allsop 1996). It could also be true in cultures where women are traditionally submissive and do not speak out easily. The absence of a strong answer does not necessarily correspond with the absence of knowledge or an opinion.

Yet studies that controlled for education level and awareness of foreign events found that these two factors did not contribute to the gender gap; on the contrary, the gender gap increased when women and men with higher levels of education and attention to current events were compared (Bendyna and Finucane 1996; Wilcox, Hewitt, and Allsop 1996). The more educated women were, the more they tended to disagree with the use of force, and the more their opinions differed from those of men.

Socioeconomic variables are often named as causal factors for the gender gap. Women are poorer than men in many countries, and military spending takes money away from domestic programs that primarily benefit women (Wilcox, Hewitt, and Allsop 1996; Regan and Paskeviciute 2003). Women suffer first when food and money shortages arise, since they are usually the primary caregivers in many countries and are responsible for the feeding and clothing of children and the elderly (Cook and Wilcox 1991; Gray, Kittilson, and Sandholtz 2006; Tessler and Warriner 1997; Togeby 1994). They tend to get fired sooner from jobs in developing nations, and suffer as victims more in war-torn areas (Enloe 2010; Gray, Kittilson, and Sandholtz 2006). Controlling for average family income, however, uncovered no link between female socioeconomic levels and preference for the use of military force (Bendyna and Finucane 1996; Cook and Wilcox 1991; Wilcox, Hewitt, and Allsop 1996).

That leaves us with biological differences. The big difference, obviously, is that women bear children; this is the root of the argument (Bendyna and Finucane 1996; Conover 1988; Conover and Sapiro 1993; Fukuyama 1998; Regan and Paskeviciute 2003; Ruddick 1983; Togeby 1994). Mothers want to see their children grow, flourish, and be happy, and this pushes them to be more open to cooperation and negotiation. When women face crises, they think of their children, and tend to seek out solutions less harmful than violence or warfare. Worldwide,

women tend to do more parenting than men do, making them more open to the emotions, wants, and needs of others (Conover and Sapiro 1993). Nonviolent options in international conflict involve many of the same concepts as mothering: peacekeeping, cooperation, reconciliation, and compromise (Caprioli and Boyer 2001; Conover and Sapiro 1993). An offshoot of the biological differences argument includes socialization differences between men and women. In most societies, men and women are raised, treated, and educated differently, resulting in different social behavior and roles. This may play a role in the gender gap (Conover and Sapiro 1993; Regan and Paskeviciute 2003).

The literature strongly suggests that women are more supportive of peace, eager to compromise, and less likely to choose war as an option than men are. Men seem drawn to competition, violence, and territorialism, while women lean toward moderation and tolerance (Gallagher 1993; Tessler and Warriner 1997). The gender gap clearly exists, especially in the area of military force. As discussed, the history behind the gender gap is multi-faceted and highly debatable. But the research exists to back up the gap itself: men and women feel differently about the application of military force. Perhaps the gender gap is actually indicative of underlying norms instead of a simple sociological or biological difference between men and women (Gallagher 1993; Melander 2005). More open, less oppressive societies work to include all members, and established norms seem to elevate respect for human life—regardless of gender—to a higher level than that found in more closed, oppressive societies (Hudson et al 2009). The feminist movement generally embraces norms that call for respect for life, peace, cooperation, and compromise (Gallagher 1993), all concepts that are strongly associated with women both stereotypically and under the gender gap. If more open nations increasingly

espoused these norms, then the overall national identity and national support for conflict might decline accordingly.

Perhaps the gender gap is evidence that the women and peace hypothesis could work. If a strong female presence could dampen male aggressiveness, then peace could be possible. When women are present in positions of authority and their voices are heard throughout society (as they would be if they played a part in the national government), countries should be willing to adhere to more cooperative and open—more traditionally feminine—standards than they would be otherwise (Regan and Paskeviciute 2003, 292; Wilcox, Hewitt, and Allsop 1996). Fukuyama (1998) opined that a world run by women would be quite different than the one we see today. He stated that a "truly matriarchal world, then, would be less prone to conflict and more conciliatory and cooperative than the one we inhabit now" (Fukuyama 1998, 33). Having female participation in the higher levels of national government, especially in greater numbers, could make countries less likely to revert to the use of force when more cooperative options are available. And the effect these women have may not be just due to their specific votes or support for policies, but may actually come about because of changing national norms. It could be a chicken-or-egg scenario: do women in leadership positions cause a nation to rethink its priorities and acceptable behaviors? Or are women in leadership positions indicative of a nation that has already begin to embrace new, more feminist norms?

Scholars have already raised the question of the effect of women in national leadership roles on interstate conflict, in different ways. Some analyzed the effects specific female government leaders or the level of gender equality in a nation had on warfare (Caprioli 2000; Caprioli and Boyer 2001; Melander 2005; Regan and Paskeviciute 2003); others looked at the problem from a socioeconomic point of view (Caprioli 2000). Hudson et al (2008) found a strong

11

relationship between female security and a nation's peacefulness, although they did not focus specifically on women in higher office. Most research focused on the second half of the 20th century, since female leadership at the national level was rare during earlier decades. The idea of a female head of state is still relatively new, one that most nations have not experienced and may not for decades to come (Caprioli and Boyer 2001; Gray, Kittilson, and Sandholtz 2006; Peterson and Runyan 2010). Since the widespread appearance of women in higher levels of political office is a fairly recent phenomenon, any effect that female chief executives have on the proliferation of peace may not show up until the first few decades of the 21st century or later.

However, despite the broad, varying literature on gender issues in politics and throughout the world, few have taken on the question of whether or not women truly have a pacifying effect at the national and international level. Only a handful attempt to capture this exact research question, and they do so well, yet each has shortfalls. I will give a general explanation of a few of the studies to tackle this specific research question, explaining where they fell short, and how I hope to increase the reliability and validity they attained by expanding the variables and concepts explored throughout each.

Caprioli (2000), acknowledging the scarcity of female heads of state to analyze, explored the concept that gender equality within a country could have the same effect as female political leadership or a female chief executive. She hypothesized that greater gender equality—as a proxy for female leadership—leads to fewer conflicts, and that more unequal societies would be more war-prone. As a causal mechanism, she explained that gender equality is an appropriate measure because states use similar political techniques on both the domestic and international stages, so a state that exercises oppressive, discriminatory, and violent methods in domestic affairs will handle international situations similarly (Caprioli 2000, 52). She also explained that

states that support norms of tolerance and equality are more likely to exhibit tolerance and

respect of others internationally as well (Caprioli 2000; 52 and 55). She measured gender

equality three ways: socially, politically, and economically. Social equality was represented by a

state's fertility rate and level of education, while political equality was defined by the number of

years that women have had the right to vote and the number of women in the upper house of

parliament (Caprioli 2000, 57). She specifically focused on the upper house, explaining that the

upper house has a greater impact on foreign policy than does the lower. The female percent of

the labor force represented economic equality. Controlling for contiguity, number of alliance

partners, democracy, and wealth, Caprioli found that gender equality—or lack thereof—does

seem to affect a state's rate of interstate conflict. States with lower percentages of women in the

upper chamber of parliament were more likely to use military force in disputes (2000, 61). A 5%

decrease in the percentage of women in parliament and a 5% decrease in women in the labor

force each make a state just under five times more likely to use force (2000, 61). She also

observed a negative correlation of gross domestic product (GDP) per capita with military force

use (2000, 63). In other words, controlling for contiguity, alliance formations, GDP per capita,

and level of democracy, nations exhibiting greater gender equality as operationalized above were

less likely to use military force (2000, 63).

Caprioli's work spans an impressive amount of data and her results add strength to the

women and peace hypothesis. However, while she accurately explained that a scarcity of female

chief executives limits the ability to use the executive branch as an independent variable, using

the percent of female executive cabinet members could fill that gap. Also, adding the percentage

of women in a nation's lower chamber of parliament would reflect the norms of the civilian

populace to a greater degree. While the upper chamber of parliament can sometimes exercise

more power, bicameral parliaments differ state-to-state: some nations' upper chamber members are appointed and/or have less power than those in the lower chamber, and the amount of power given to each chamber varies widely (National Democratic Institute for International Affairs Legislative Series, accessed September 25, 2011). Examining only the upper chamber leaves out what could be the more substantial lower chamber. Finally, Caprioli only counted each conflict once for each state involved, even if said conflict spanned multiple years (2000, p. 60). This may fail to capture additional impacts made by women who attained higher office after a conflict began. If the presence of women—through any of the causal mechanisms discussed so far—does lower the incidence of conflict, then we might expect to see such effects increase after election years that saw greater numbers of women get elected.

Caprioli and Boyer (2001) built on Caprioli's earlier study (2000). Viewing gender equality once again as a proxy for female executive leadership, they compared the female data to the amount and level of violence present in interstate conflicts, from 1 (no violence) to 4 (full scale war) (p. 512). Examining data from 1945-1994, they operationalized gender equality mainly through political equality—the percentage of women in the upper house—in each nation (p. 511). Instead of measuring the number of crises states were involved in, however, Caprioli and Boyer controlled for the few female chief executives that do appear in their study, along with the crisis initiator, regime type, crisis trigger, gravity of event, and power discrepancy (a composite score with a number of factors) (p. 513). They found that states with higher levels of gender equality exhibited lower levels of violence during a crisis (p. 513).

Drawbacks to their study include the fact that ten years have passed since they collected and published their findings, so more women have since entered higher office. As in Caprioli's earlier research (2000), they confined their political snapshot to the upper house of parliament

again, ignoring the lower house and any executive cabinet members, repeating the same problem. Bicameral parliaments' upper houses do not all function the same way; neglecting the lower chamber does not account for the full variable. Also, Caprioli and Boyer (2001) did not compare their independent variables to the occurrence of conflict or war, instead examining violence levels for each.

Melander (2005) hypothesized that political gender equality affects the amount of personal integrity rights abuses in a country. He measured political gender equality in two ways: whether or not the chief executive of a nation is female, and the percentage of women in a nation's parliament (upper house). Defining personal integrity rights abuse as government-sanctioned kidnapping, torture, killing, or imprisonment, and using data from 1977-1996, he observed that the number of rights abuses decreases with an increasing percentage of female parliament members in the upper house (2005, 150). He uncovered no relationship between the amount of rights abuses and female executive leaders, but he surmised that the lack of female chief executives had something to do with that (2005, 150). Melander examined a critical area of the relationship between women and peace by exploring female leaders' effects on intrastate violence and state-sanctioned abuses. In finding support for the women and peace hypothesis here, his research adds substantial weight to the hypothesis. And while he only examined 20 years of data (1977-1996), and did not look across state lines in his research, Melander brought up a key point. He mentioned that feminist theories "argue that more equal societies that are not based on gender hierarchies…ought to be less plagued by collective violence internally as well as in relation to other societies" (Melander 2005, 149).

As briefly mentioned earlier, feminist theory—and I will generalize some here— embraces the presumed relationship between women and peace. Different offshoots of feminism

espouse various causal mechanisms behind this relationship, naming everything from the maternal abilities of women to changing societal norms. However, mainstream feminist theory calls for equality, freedom from oppression, and self-government, and it generally supports cooperative, pacific methods in conflict resolution (Caprioli 2000; Conover and Sapiro 1993). To explain the role that feminist theory might play in the women and peace hypothesis, I will describe two studies that actually found little support for the hypothesis. Tessler and Warriner (1997) and Tessler, Nachtwey, and Grant (1999) found no association between women and peace in their analyses of attitudes toward the Arab-Israeli conflict in the Middle East. Tessler and Warriner (1997) examined survey data on the conflict from Kuwait, Egypt, Palestine, and Israel, and concluded that women in these nations were no more pacific than men toward conflict (1997, 280). Interestingly enough, however, concern for women's status and human rights correlated with pacific leanings, no matter what the person's gender (1997, 280). Tessler, Nachtwey, and Grant (1999) added to this by collecting additional data from Lebanon and Jordan, and they still concluded that the women and peace hypothesis does not apply in the Middle East. Using the six countries listed above, and varying their survey collection in time, Tessler, Nachtwey, and Grant inferred that the Middle East differs from the United States and other Western cultures in its lack of a gender gap concerning the use of force in the Arab-Israeli conflict. They did note, however, that the specific salience of the Arab-Israeli conflict could produce such different results (1999, 530). They did not see outright support for the women and peace hypothesis, but again they found that individuals who hold feminist values tended to exhibit lower levels of support for the Arab-Israeli conflict, bringing up the key question: if one finds a relationship between women and peace, is it actually a relationship between changing norms and peace? Or are women actually affecting decisions in some way while in office?

A final study, authored by Regan and Paskeviciute (2003), measured the effect that the ability of women to influence foreign policy decisions had on a state's likelihood of engaging in a militarized interstate dispute (MID). They operationalized their independent variable by a nation's fertility rate, percentage of women in higher government office, and percentage of women in paid labor. Comparing states at the dyadic level, they hypothesized that the level of violence in disputes would decrease with increases in the above variables. Examining states and MIDs from 1965-1992, they used the lower house of parliament instead of the upper house, reasoning that the lower house in most bicameral systems has more political power than the upper (2003, 290). Fertility rates approximated political and economic access, since caring for more children gives women less time to participate politically or to work outside of the home (2003, 292). They found that GDP per capita had little effect on the likelihood of entering a dispute, while contiguity, level of democracy, and alliances all had the predicted effect. They do observe a decrease in the likelihood of a state entering a MID when women have access to political power and when birthrates are lower (Regan and Paskeviciute 2003, 295). This suggests that when women have a political presence, and have greater time to participate and work outside of the home, warfare may become less likely (Regan and Paskeviciute 2003, 299).

One characteristic of these studies that may affect the results of each concerns regime type. Democracies, autocracies, and regime types in between them tend to exhibit different rates of international conflict. Democracies, specifically, do not tend to fight other democracies, but they do exhibit higher rates of conflict against autocracies (de Mesquita et al 1999). Another consideration when discussing non-democratic regime parliaments is that some of these parliaments may be relatively powerless institutions that bear little resemblance to the norms held by those nations or their leaders (Melander 2005, 153). Including different regime types in

17

one study could produce results that do not truly reflect the situation at hand; the rate of interstate conflict differs by regime type, as does the power vested in a nation's legislative or executive branch (deMesquita et al 1999; Melander 2005), so narrowing the focus to democracies alone may be a better way to get to the heart of the research question. Democracies also often share the same feminist norms that are associated with more open systems and more opportunities for women to reach higher office (Hudson et al 2008). Some theorists predict that how a democracy is born may matter as well; if it grows through a national want and acceptance of more open norms, than it may be a more stable, open system than one forced from outside (Hudson et al 2008). As Caprioli (2000) pointed out, how a nation acts domestically is indicative of how it will behave internationally. States that sanction violence and oppression are more likely to embrace those behaviors in conflict situations as well (Hudson et al 2008).

# Theory

The literature offers a broad range of theories to explain the women and peace hypothesis, and gender-based stereotypes and the gender gap on the use of military force back up the idea that the women and peace hypothesis has merit. The question remains, however, as to *how* women actually make an impact, not just across a society, but at the national level. Are female legislators actually voting against the use of force in interstate conflicts? Are female executive cabinet members pushing for policies through diplomatic or other non-military channels, rather than acquiescing to military force options? While no definitive empirical research exists on the topic, to my knowledge, a cursory examination of the voting records of several female U.S. Senators and Congresswomen largely rules this out as a probable cause. Examining individual female U.S. legislators' voting records from 1991-2010 reveals that many

18

of these women's votes were all over the map, and they had little correlation—at least on the surface—with either strict pacifist leanings or partisanship (Library of Congress website, accessed April 25, 2011). At times, women voted along party lines one way or another on a bill authorizing the use of military force (or denying it, as applicable), but even these seem counterintuitive to the women and peace hypothesis. Politics seemed to reign over any display of pacifism or a search for alternative options in conflict. Female U.S. legislators seem no more likely to vote for peace than their male colleagues are.

The idea that political reasons would trump gender-based motivations in higher office does not seem surprising, since too many conflicting obligations would probably be at play in a congressional vote for simple pacifism to have an effect. Women, like men, have to attract donors in the U.S. political system, have to achieve some seniority before they attain certain positions of leadership and power, and have to appeal to a broad base of constituents to get elected in the first place. Just as male politicians do, women then have to get re-elected after a first term. Partisanship, current events, united or divided government…any number of factors influence the outcome of a simple yea-or-nay vote in most democratic political systems.

Beyond all of this, women who rise to positions of national leadership may not be representative of all women. Women in powerful positions may have more masculine qualities, enabling them to get elected in the first place, which could affect how peaceful and cooperative a stance they might take toward impending conflict (Caprioli 2000; Caprioli and Boyer 2001; Alexander and Andersen 1993; Swers 2007). Women are viewed as more compassionate, liberal, and emotionally involved than men are; combine this with the stereotype that women are less capable in dealing with foreign policy, defense issues, and national security than male leaders are and one can see how a female leader facing conflict may feel the need to act masculine and

19

aggressive in order to overcome the perceived weakness of being a woman. Besides the rarity of female executives internationally, this possible masculine tendency was another reason Caprioli (2000) did not use female chief executives as her primary independent variable in her research. Caprioli and Boyer made the additional point that women in male-dominated environments (such as national government, especially in a foreign policy setting) could feel a need to act more aggressively to prove themselves (2001, 507). Foreign policy especially could be prone to this sort of behavior, as it is traditionally seen as an issue area where men excel. Women are expected to be stronger on social and domestic issues, and men on defense and foreign policy (Alexander and Andersen 1993; Caprioli and Boyer 2001). As evidence of the problem that gender stereotypes present to female chief executives, the existence of a female chief executive has been positively associated with an increase in military spending (Koch and Fulton 2011).

Male leaders could feel forced into a corner if dealing with a female leader of another nation. Especially in male-dominated cultures, male leaders could feel that it would be worse to lose to a woman than to go to war (Caprioli and Boyer 2001). And perhaps women who exhibit these "masculine" qualities when in leadership positions actually reached their individual offices because that is how they are. It may not be an act; it may be their personal characteristics. Finally, the positive relationship uncovered between female chief executives and greater military spending disappears when the percentage of women in parliament starts to increase (Koch and Fulton 2011). Perhaps when surrounded by more women in office, female leaders feel freer to follow their true preferences, reinforcing the possibility of the threshold effect (Melander 2005).

I cannot with any accuracy measure female leaders' underlying beliefs and thoughts, nor can I guess at male leaders' motivations in their interactions with female leaders. Both, however, may be inconsequential if what causes the presence of women to alter a nation's prospects for

peace goes to a much deeper level. Conover and Sapiro (1993) mention that feminist theories—whether held by men or women—tend toward more peaceful or cooperative options (also see Caprioli 2000; Cook and Wilcox 1991; Gallagher 1993). These findings were mirrored in Tessler and Warriner's 1997 study of Middle Eastern nations and feelings toward the Arab-Israeli conflict, as well as Tessler, Nachtwey, and Grant's 1999 follow-up research. The latter two studies emphasized the concept that individuals who held more feminist-oriented beliefs toward gender equality and conflict also held more pacific views toward the Arab-Israeli conflict (Tessler and Warriner 1997; Tessler, Nachtwey, and Grant 1999).

The election or appointment of greater numbers of women to higher national office, whether via parliament or an executive cabinet, may represent a specific set of national norms that seek greater gender equality, racial equality, and more respect for diversity, compromise, and cooperation (Caprioli 2000; Caprioli and Boyer 2001; Caprioli 2005; Gallagher 1993; Melander 2005; Regan and Paskeviciute 2003; Tessler and Warriner 1997; Tessler, Nachtwey, and Grant 1999). The reverse may also be true, however: a growing national awareness of these same norms could cause more closed, patriarchal systems to appoint or elect greater numbers of women to office in the hopes of appeasing or satisfying those who favor such norms while still keeping the reins of power in male hands (Peterson and Runyan 2010). Yet as women get elected or appointed in patriarchal systems, they could bring about greater awareness of feminist norms, which could bring about the same affect. These same norms may be also inherent in democracies; thus, democracies alone are examined in this study (Melander 2005). Nations that offer greater gender equality seem to experience a lower incidence of interstate conflict and a lower rate of violence when conflict does occur (Caprioli 2000; Caprioli and Boyer 2001). Individuals who view gender quality in a positive light, and who hope for peace—and support

military force usage less—in conflict situations tend to conform to feminist theories, preferring cooperation and compromise over threats of war and violence (Gallagher 1993; Tessler and Warriner 1997; Tessler, Nachtwey, and Grant 1999).

Nations who elect or appoint increasingly larger numbers of women to national offices exhibit a specific set of norms that may simultaneously allow those citizens and leaders to be more open to cooperation and alternative choices when faced with a situation involving interstate conflict (Gallagher 1993; Melander 2005).

Therefore, while the increased presence of women in higher office may be associated with lower risk of violent interstate conflict, it may not be the women themselves who make the difference, but the norms that their elections or appointments represent. As Melander notes, "a softening up of the role prescribed for men can de-emphasize violence and substitute empathy for some of the self-control" (2005, p. 154). Couple this thought with Caprioli's theory that "domestic social factors may have greater explanatory potential when predicting state militarism than do traditional measures" (Caprioli 2000, p. 52), and one can see that societal norms and the relationships that reflect them have some predictive power in interstate conflict situations. If nations are open to greater gender equality, they may elect or appoint more women to higher offices; even if nations are not fully open to norms of gender equality, the presence of greater numbers of women—mandated or not—might expose leaders and citizens alike to these norms, thus exacting change as well. If these women hold feminist values, and prefer cooperation or compromise in conflict, then male colleagues are more likely to feel and act in similar ways.

If the presence of women in higher office is representative of this norm shift, then we should expect not only the women of the upper and lower chambers of parliament, but the

percent of women on the executive cabinet to matter as well. I believe that support for the hypotheses will also show support for this causal mechanism.

# Hypotheses and Design

The literature endorses the idea that nations that elect or appoint women to official leadership positions benefit from a lower incidence of interstate conflict, or war. However, empirical studies on this point are limited, and gaps exist in the aforementioned research. Caprioli (2000), Caprioli and Boyer (2001), Melander (2005), and Regan and Paskeviciute (2003) all examine either the upper or lower house of parliament, leaving out other areas of government to the detriment of the research. If examining the upper house, the lower house in bicameral systems is ignored. The reverse applies to Regan and Paskeviciute's research. And none include executive cabinet members in their analysis. If the gender gap in support of the use of military force exists as the research claims it does, the presence of women in the upper reaches of a nation's government should affect that nation's tendency to resort to violence in interstate conflict. Why ignore a chamber of parliament? Lower chamber members may not have the political elite status of members of the upper chamber, but the fact that most parliament members are elected and serve on the national stage could cause female officeholders in either chamber to have a similarly pacifying effect if the hypothesis has any merit, and the power invested in each chamber varies between nations. Caprioli (2000) explained that when asking what techniques or values a state will display in the international arena, we should first look at that state's domestic players and policy. States use the same technique, and support the same values, at home and internationally (Caprioli 2000, p. 52). Women who are elected to a nation's lower chamber of parliament should reflect the norms held by the citizens. Therefore, their presence matters.

The same premise applies to women appointed to the executive cabinet, if one exists. While female chief executives are presently still too few to properly study in this manner, most democracies employ some type of executive cabinet. While the powers of each cabinet member may vary, the presence of women at this high level of national office should have a similar effect to those in the chambers of parliament, especially those appointed rather than elected. Perhaps the percentage of women on the executive cabinet could serve as a useful proxy for the presence of a female chief executive.

I ask the same question asked by these other scholars: does a relationship exist between the number of female government leaders at the national level and a nation's violent interstate conflicts? Yet I take the question a step further. I include both the upper and lower houses in bicameral systems as well as executive cabinet members in my analysis, and I only examine nations that achieve democratic status during the decades studied. This is the next logical step in extending the research question. Since earlier analyses found that women had an effect, whether in the upper or lower houses of parliament, including all of parliament (when applicable) and the executive cabinet should make results more substantial. Focusing on democracies or those nations with the potential to become democracies might further refine the results.

I hypothesize that the greater the number of female leaders at the national government level, the lower the amount of violent interstate conflicts a nation will participate in. My independent variable, female leaders at the national government level, is broad. The ideal measure would include an analysis of nations with a female executive leader, but here I encounter the same problem that the others faced: the lack of female chief executives. While the numbers of female heads of state have increased since 2000, they are too few to adequately test the hypothesis (Peterson and Runyan 2010, 15). And while the authors above used variations of

the percentage of upper or lower house seats held by women and viewed gender equality as a proxy for female leadership, I analyze female leadership in multiple capacities instead. Based on the literature, the presence of women in higher office can have an effect on the likelihood of a nation to go to war. It is entirely possible that female political leaders do influence policy in matters of conflict. If women are more pacific than men and try to search out more cooperative ways of resolving conflicts than men do, then female voices from both chambers and the executive cabinet should all be counted. If greater numbers of female leaders are actually indicative of shifting norms and national priorities, these same numbers will still matter.

Therefore, Hypothesis 1 is:

H1:     the higher the percentage of women elected or appointed to a nation's parliament and executive cabinet, the lower that nation's likelihood of violent interstate conflict.

So far, I have introduced literature discussing women and peace, and women in parliament. Through the analysis and results, I will display percentages and discuss the impact that women have—or do not have—based on these percentages. One specific area deserves mention: the idea of a threshold effect of women in government. For female leaders to have an effect, one argument holds that a certain threshold percentage of women in government must first be reached (Beckwith 2007; Bystydzienski 1993; Melander 2005). Numbers given for this threshold include anywhere from 15% to a third of parliamentarians (Bystydzienski 1993; Melander 2005).

The United Nations Development Program, in its 1995 focus on Human Development, specifically focused on gender equality and the reduction of inequalities and disparities (U.N. Development Program 1995). In the Program's discussion of gender equality, the dire prediction

was made that gender equality would not be within reach until some major changes were made, including increasing the numbers of women in government leadership roles. According to the report, "a critical 30% threshold should be regarded as a minimum share of decision-making positions held by women at the national level" (U.N. Human Development Report 1995). The U.N.'s 1990 Commission on the Status of Women recommended 30% female as the critical number for parliaments and cabinets to strive for—at a minimum—in order to ensure that policies passed reflect the needs of female citizens as well as male ones, and the U.N. adopted that policy and pushed it to member countries (U.N. Human Development Report 1995). The data analyzed here could answer the question of how accurate the 30% benchmark is, since a handful of nations have reached the 30% mark for women in a chamber of parliament. Neither Melander (2005) nor Caprioli (2000) found existence of a 30% threshold effect in their research. Despite fewer nations achieving the 30% female goal in parliament, Caprioli (2000) found support for the hypothesis that gender equality—measured as an index defined by social, political, and economic equality—lowers a nation's rate of interstate conflict, and Melander (2005) observed support for his hypothesis that greater gender equality is related to lower rates of state-sanctioned human rights abuses. Both found support for their hypotheses without concern for a threshold effect, although Melander correctly stated that there simply have not been enough women in office, and perhaps as the numbers increase over time, a threshold effect will emerge (2005).

However, both scholars examined only the upper house of parliament when applicable, and the data show that women can get elected to the lower house in greater numbers (Women in National Parliaments Data, accessed August 20, 2011). Since I will examine both houses for bicameral systems, I will include a hypothesis for the threshold effect:

Hypothesis 2 (H2):

> Once a nation's percentage of women in parliament reaches 30%, that nation's rate of violent interstate conflict will start to decrease with an increase in the percentage of women in parliament.

To empirically analyze these hypotheses, I examine nations and their governments from 1971-2001. While the following decade brought both increasing numbers of female leaders and a changing set of international conflicts, more recent data are not available. My analysis begins with 1971 because the United Nations designated 1975 as the Year of the Woman, and the following decade (1976-1985) as the Decade of the Woman, so 1971 gives me a 31-year window to work with (United Nations website, accessed August 20, 2011).

My dependent variable, the number of violent interstate conflicts, comes from the Correlates of War (COW) database, specifically the Militarized Interstate Dispute (MID) dataset, version 3.10 (Ghosn, Palmer and Bremer 2004). I include all conflicts that rise to a hostility level of 4 or 5, with 5 representing the highest level of hostility. Within these two categories, I include all conflicts containing hostile acts of level 15 or higher on a scale of 0-21. On the hostile act scale, zero represents no militarized action and the hostility inherent in each act increases with the numbers to 21, which represents a nation joining an interstate war. Level 15 represents a seizure, level 16 is associated with an attack, level 17 with a clash, level 18 a declaration of war, level 19 represents chemical, biological, and radiological weapons usage, and level 20 marks the beginning of interstate war (Ghosn, Palmer and Bremer 2004). Since the lower hostility levels— 0 through 14, per the MID dataset—do not represent an actual violent exchange, I have limited my analysis to those events that do include such an event. A conflict that does not resort to violence was resolved through other means, so it may not be beneficial to this study. Since

female leaders, per the hypotheses, should have an effect on the number of violent interstate conflicts, I want to focus on those conflicts that do involve violence. A conflict fitting these prerequisites between two or more states would be coded two or more times, since the unit of analysis is the state. And unlike earlier studies, a conflict will count for every year it is in existence. If a conflict stretches on for ten years, every nation involved for each of those years will be counted as in a violent interstate conflict. If a nation elects or appoints a greater percentage of women to parliament or the executive branch during the conflict, I expect to see that nation withdraw from the conflict—or possibly experience a lowering of the hostility level—around the same time. Table 1 lists the hostile act categories.

**Table 1: Highest Act Levels**

| Highest Act of Hostility Experienced in Interstate Conflict for a Given Year | |
|---|---|
| No militarized action | 0 |
| Threat to use force | 1 |
| Threat to blockade | 2 |
| Threat to occupy territory | 3 |
| Threat to declare war | 4 |
| Threat to use CBR weapons [Chemical, Biological, or Radiological] | 5 |
| Threat to join war | 6 |
| Show of force | 7 |
| Alert | 8 |
| Nuclear alert | 9 |
| Mobilization | 10 |
| Fortify border | 11 |
| Border violation | 12 |
| Blockade | 13 |
| Occupation of territory | 14 |
| Seizure | 15 |
| Attack | 16 |
| Clash | 17 |
| Declaration of war | 18 |
| Use of CBR weapons | 19 |
| Begin interstate war | 20 |
| Join interstate war | 21 |

Data obtained from Militarized Interstate Dispute dataset 3.1 (Ghosn, Palmer, and Bremer 2004).

I operationalize my main independent variable in four ways. First, I include a variable (UPPER) for the percentage of women in the upper house of parliament (or the single chamber if a nation employs a unicameral system). The variable LOWER represents the percentage of women in the lower house (if one exists). PRLMNT is the average percentage of women across both chambers in bicameral systems and just the upper if no lower chamber exists. Finally, the variable CABINET represents the percentage of women on the executive cabinet. The percentages of women in the upper and lower houses come from the Inter-Parliamentary Union database and the Inter-Parliamentary Union's 1945-1995 Statistical Survey. Female executive cabinet members come from *The Statesman's Yearbook*, *The International Yearbook and Statesmen's Who's-Who*, and the Worldwide Guide to Women in Leadership website.

The upper chamber, lower chamber, and parliament average variables are straightforward: the percentage for each country-year data point reflects the actual percentage of parliament members in office for the majority (greater than six months) of that calendar year. The cabinet variable, however, is not as straightforward. Distinguishing between legitimate cabinet positions and ceremonial or inconsequential ones is partly a matter of opinion; the cabinet numbers and actual cabinet makeup varied not only from nation to nation and year to year, but from source to source as well. I used a combination of three sources to gather the information, and use two variations of the variable to get my results. The first is a straight number representing the actual number of women on the cabinet for each country-year. The second variation, used only in the analyses dealing with the threshold effect, is a percentage based on an average for the baseline number of cabinet positions, as the variation between cabinet positions and sources was too great to lend credibility to my numbers without establishing a baseline.

Control variables include gross domestic product (GDP) per capita, contiguity, military

spending, national capabilities, number of years since women were granted the right to vote,

whether a system is presidential or parliamentarian, and democratic status. Increased national

wealth, operationalized by GDP per capita, has been associated with a decrease in human rights

violations and a decrease in reliance on the military to resolve conflicts (Caprioli 2000; Melander

2005). Poor conditions, or a lack of food or shelter, can exacerbate existing problems and drive

people to act in ways that they might not otherwise. In other words, poverty leads to desperation

but wealth generally does not (Melander 2005). GDP per capita data can be found in several

different sources, but I plan to use the United Nations data site supplemented by the World Bank

website, and I take the logarithm of each value to account for the decreasing effect GDP per

capita may have at extremes.

Democracies are controlled for by only examining nations that achieve democratic status,

as scored in Polity IV, at some point from 1971-2001. The Polity IV website categorizes

democracies as those nations whose governments score a 6 or higher on the Polity Index, which

ranges from -10 to +10 (The Polity Index, accessed August 20, 2011). While some nations move

in and out of democratic status over the 30 years examined, many do not fluctuate at all; 28

nations are stable democracies for the entire 31-year period. Even allowing for the variation of

those nations who lose their democratic status over time, I still expect clearer results than I

would if examining all nations, regardless of regime type. Democracies are less likely to go to

war with each other, a concept known as the democratic peace (Bremer 1992; deMesquita et al

1999; Vasquez 2005). Democratic nations often espouse more liberal norms than autocratic

nations, which may increase the numbers of women in higher offices (Caprioli 2000; Kenworthy

and Malami 1999). I do not expect the varying level of democracy in a state to matter as much as

30

actual democratic status, since that can act as proxy for national norms (Caprioli 2000;

Fukuyama 1998; Kenworthy and Malami 1999; Melander 2005). Using Polity IV, I only include

nations that score a 6 or higher as stable democracies (Regan and Paskeviciute 2003).

One reason to separate democracies from autocracies derives from how much relative

power parliaments and cabinets in each type of state actually have. Democratic parliaments tend

to function more or less as envisioned; women elected to office there have a substantial chance

of affecting policy if they are so inclined. Autocracies, on the other hand, function differently.

Autocracies may have women in high government offices, or have female cabinet members, but

autocratic nations' parliaments can and do "function as rubber stamps, since they operate within

very undemocratic contexts…" (Melander 2005, 153). Women who are included in these types

of parliaments or cabinets, such as the Iraqi Parliament under Saddam Hussein, may simply be

included to appease international institutions or larger groups with their country (Bystydzienski

1993; Melander 2005). While female percentages in autocratic governments may be similar to or

higher than the percentages of women in democratic nations' parliaments, the power these

women possess will likely be measurably less (Bystydzienski 1993). The 93 nations examined in

this study are listed in table 2, below.

**Table 2: List of Nations Analyzed**

| Nations That Achieved Democratic Status between 1971-2001 | | | |
|---|---|---|---|
| Argentina | Finland | Malawi | Russia |
| Armenia | France | Mali | Senegal |
| Australia | Gambia | Mauritius | Serbia |
| Austria | Germany | Mexico | Slovak Rep |
| Bangladesh | Ghana | Moldova | Slovenia |
| Belarus | Greece | Mongolia | Solomon Is. |
| Belgium | Guatemala | Mozambique | S. Africa |
| Benin | Guyana | Namibia | Spain |
| Bolivia | Haiti | Nepal | Sri Lanka |
| Botswana | Honduras | Netherlands | Sudan |
| Brazil | Hungary | New Zealand | Sweden |
| Bulgaria | India | Nicaragua | Switzerland |
| Canada | Indonesia | Niger | Taiwan |
| Chile | Ireland | Nigeria | Thailand |
| Colombia | Israel | Norway | Trinidad |
| Costa Rica | Italy | Pakistan | Turkey |
| Cyprus | Jamaica | Panama | Ukraine |
| Czech Rep | Japan | Paraguay | U.K. |
| Denmark | Korea (S) | Peru | USA |
| Dom Rep | Latvia | Philippines | Uruguay |
| Ecuador | Lesotho | Poland | Venezuela |
| El Salvador | Lithuania | Portugal | Zambia |
| Estonia | Macedonia | Romania | |
| Fiji | Madagascar | | |

Nations were identified through the Polity IV dataset (The Polity Index, accessed August 20, 2011).

Contiguity is historically strongly associated with an increase in interstate violence (Bremer 1992; Caprioli 2000; Caprioli and Boyer 2001; Regan and Paskeviciute 2003). Neighbors fight with neighbors. I would expect states to be more likely to go to war when they border higher numbers of other states, so this effect would need to be controlled for. Contiguity data are taken from the COW database (Stinnett et al 2002).

I use military spending as a control variable because higher rates of military spending can be associated with an increased likelihood of interstate conflict (Fordham 2004). In other words, if you have it, you probably want to use it. Higher rates of military spending are associated with an increase in military capabilities and a greater likelihood of war (Fordham 2004). Military

spending data comes from the Correlates of War database (Singer, Bremer and Stuckey 1972). The national capabilities variable comes from the Correlates of War database as well, called the Composite Index of National Capability (CINC) (Singer, Bremer and Stuckey 1972), and it is created from a catalogue of six separate variables: total and urban populations, iron and steel production, energy use, military manpower, and military spending (Correlates of War database, accessed September 24, 2011). The CINC variable differs from military expenditures alone because it incorporates population, production/consumption, manpower, and energy use, all of which vary greatly by nation. The CINC variable is not necessarily a certain predictor of conflict, but some support has been found for power preponderance leading to greater peace than a balance of power (Bremer 1992), so I include the variable to control for any unforeseen effects of power disparity or similarity.

The number of years that women have held the right to vote is used by Caprioli (2000) and Caprioli and Boyer (2001) to represent part of the gender equality variable. I expect that, as described in the literature, female suffrage may stand as a proxy for norms that respect gender equality. I expect that the greater the number of years that women have exercised the right to vote, the larger the impact they may have on lowering the rate of violent interstate conflict. This may translate into a greater likelihood for peace in one or a combination of ways: female voters may elect politicians espousing beliefs closer to their own, or politicians may become more aware of female voters and alter their beliefs and platforms accordingly. Or perhaps changing policy preferences, especially regarding military force, are due to changing norms.

Using a control variable for parliamentarian versus presidential systems should account for any difference in effectiveness or power of legislative or executive branch leaders between the two different democratic systems. In other words, I expect that executive cabinets in

33

presidential democracies will be more effective than parliaments. Likewise, I expect that parliaments may also have more of an impact in presidential democracies, even if an executive branch cabinet exists, because they have more latitude to act outside of party lines.

Using a cross section time series analysis and logistic regression, I analyzed each calendar year from 1971-2001 (31 years), so any conflict rating a 4 or 5 on the hostility index and experiencing an act registering as 15 or higher per the MID 3.10 dataset is counted for every year it occurs in. If no conflict occurred for a specific country in a given year, that country-year variable was marked as zero; if one did occur, and the hostility level reached 15, that variable was marked "1." For example, the Iran-Iraq War spanned the years of 1980-1988, so Iran and Iraq each were counted as at war/conflict for each of those years. While the number of fatalities in a given conflict could also be correlated positively with violence, or negatively with the presence of women in higher levels of government, too many of the conflicts in the MID 3.10 dataset were missing fatality numbers for the category to be useful. Therefore, the use of a single variable representing involvement in an interstate conflict registering 4 or 5 in the MID database (and coded 15 or higher for highest hostile act) represents the best operationalization of this concept. If women in higher office do affect the likelihood of violent interstate conflict, I expect to see a corresponding decrease in the actual numbers of violent conflicts in nations with more women in office; using an up-or-down variable to represent the presence of violent interstate conflict best answers that.

# Data Analysis

To analyze the collected data, I ran a time series cross-section analysis, using logit due to the dichotomous nature of the dependent variable. Coefficients display in log-odds, so I converted them to odds ratios. Since I expected the dichotomous variable to move in one direction with an increase in the main independent variables, I employed a one-tailed test. The data analysis shows moderate support for the women and peace hypothesis, specifically for hypothesis 1 as detailed above. Hypothesis 2 is not supported by the data and results, but a third area of interest emerges from the results: the effect of women in leadership positions when interacted with democratic system type.

While the percent of women in government is not the strongest predictor of violent interstate conflict, the percentages of women in parliament seem to make a difference. Controlling for GDP per capita, military expenditures, national capabilities, contiguity, suffrage, female chief executives, and democratic system type, increasing the percentage of women in a nation's parliament—specifically the upper chamber in bicameral systems and the lone chamber in unicameral ones as well as the overall percentage in parliament—seems to decrease the likelihood of that nation experiencing violent interstate conflicts. Increasing the percentages of women in a nation's lower chamber alone, if one exists, and on the executive cabinet, does not seem to alter the rate of violent conflict in a significant way. In fact, while neither the lower chamber variable nor the cabinet percentage reached significance, the signs for each are the opposite of what is hypothesized. This result changes when interacted with system type.

I will begin by discussing the data sources and formats. I collected data for 93 countries over a period of 31 years, from 1971-2001. The specific countries examined are those identified by Polity IV as reaching democratic status at least once during the 31 year period. A complete

35

list of these nations appears in Table 1, below. An analysis of 93 nations over 31 years results in 2883 discrete sets of observations. Of these observations, all span the 31 selected years.

The dependent variable comes from the Correlates of War database, specifically from the Militarized Interstate Dispute dataset, version 3.1 (Ghosn, Palmer, and Bremer 2004). I used a dichotomous dependent variable to describe those conflicts that escalated to a highest act of hostility of a 15 or higher, as identified by the dataset. Highest acts are assigned numbers based on Table 2 below. In my data collection, I assigned a zero to those conflicts that did not reach level 15 or to those country-years that are not associated with any kind of interstate conflict.

The main independent variables came from several sources. The percentages of women in the upper and lower chambers of parliament in bicameral systems, and the percentage of women in the lone chamber of parliament in unicameral systems, came from the Inter-Parliamentary Union's (IPU's) database. Specifically, data from 1971-1995 were obtained from the IPU's Women in Parliaments Worldwide Statistical Survey, 1945-1995, published in 1995. Data from 1996-2001 were collected from the IPU website, where a database is maintained through 2008. The average percentage of women in parliament for each nation over the analyzed decades is represented in Table 3, below.

**Table 3: Average Percentage of Women in Parliament 1971-2001\***

| Nation | Upper Chamber | Lower Chamber | Nation | Upper Chamber | Lower Chamber |
|---|---|---|---|---|---|
| Argentina | 4.8 | 9.9 | Madagascar | 4.3 | 5.8 |
| Armenia | 24.0 | --- | Malawi | 7.7 | --- |
| Australia | 17.5 | 6.4 | Mali | 3.6 | --- |
| Austria | 19.3 | 13.8 | Mauritius | 5.0 | --- |
| Bangladesh | 8.0 | --- | Mexico | 10.1 | 10.3 |
| Belarus | 12.7 | 2.6 | Moldova | 5.5 | --- |
| Belgium | 11.8 | 9.8 | Mongolia | 17.4 | --- |
| Benin | 4.3 | --- | Mozambique | 18.2 | --- |
| Bolivia | 3.7 | 7.9 | Namibia | 8.5 | 23.3 |
| Botswana | 5.1 | --- | Nepal | 5.5 | 4.1 |
| Brazil | 2.2 | 3.3 | Netherlands | 17.5 | 20.5 |
| Bulgaria | 17.8 | --- | New Zealand | 13.5 | --- |
| Canada | 14.0 | 9.9 | Nicaragua | 10.6 | 11.4 |
| Chile | 4.6 | 8.4 | Niger | 1.3 | --- |
| Colombia | 4.2 | 7.0 | Nigeria | 1.1 | 1.9 |
| Costa Rica | 10.5 | --- | Norway | 28.0 | --- |
| Cyprus | 2.9 | --- | Pakistan | 2.2 | 4.6 |
| Czech Rep | 20.9 | 24.0 | Panama | 5.5 | --- |
| Denmark | 26.2 | --- | Paraguay | 6.6 | 3.5 |
| Dom Rep | 6.3 | 10.6 | Peru | 5.5 | 6.5 |
| Ecuador | 4.9 | --- | Philippines | 13.9 | 10.7 |
| El Salvador | 10.1 | --- | Poland | 16.2 | 13.1 |
| Estonia | 12.1 | --- | Portugal | 8.0 | --- |
| Fiji | 5.6 | 3.0 | Romania | 15.9 | 5.6 |
| Finland | 29.8 | --- | Russia | 21.2 | 22.7 |
| France | 3.4 | 6.3 | Senegal | 9.3 | --- |
| Gambia | 3.6 | --- | Serbia | 0.0 | --- |
| Germany | 12.6 | 14.9 | Slovak Rep | 22.2 | 26.0 |
| Ghana | 4.5 | --- | Slovenia | 11.4 | 8.0 |
| Greece | 4.3 | --- | Solomon Is. | 0.7 | --- |
| Guatemala | 6.1 | --- | S. Africa | 7.1 | 7.9 |
| Guyana | 21.3 | --- | Spain | 7.2 | 13.1 |
| Haiti | 4.5 | 2.4 | Sri Lanka | 3.8 | --- |
| Honduras | 8.8 | --- | Sudan | 5.4 | --- |
| Hungary | 19.4 | --- | Sweden | 30.3 | --- |
| India | 9.1 | 6.1 | Switzerland | 7.8 | 12.8 |
| Indonesia | 9.6 | --- | Taiwan | 0.0 | --- |
| Ireland | 11.2 | 7.4 | Thailand | 3.7 | 4.2 |
| Israel | 8.0 | --- | Trinidad | 17.6 | 12.1 |
| Italy | 5.6 | 9.2 | Turkey | 1.8 | 1.1 |
| Jamaica | 16.4 | 8.9 | Ukraine | 4.3 | --- |
| Japan | 9.9 | 2.4 | U.K. | 7.5 | 7.3 |
| Korea (S) | 3.5 | --- | USA | 3.6 | 6.7 |
| Latvia | 10.8 | --- | Uruguay | 4.7 | 4.9 |
| Lesotho | 22.5 | 4.2 | Venezuela | 3.8 | 5.0 |
| Lithuania | 10.5 | --- | Zambia | 5.8 | --- |
| Macedonia | 4.6 | --- | | | |

\*All data was collected from the Inter-Parliamentary Union database and website.

For the analysis, I also employed another variable (PRLMNT), which is the actual female percentage of both chambers. This variable mirrors the upper chamber percentage in unicameral nations.

The number of women in each nation's executive cabinet was pulled from *The Statesman's Yearbook*, *The International Yearbook and Statesmen's Who's-Who*, and the website of the Worldwide Guide to Women in Leadership (accessed September 10, 2011).

My control variables were collected through a variety of methods. GDP per capita, in 2005 United States dollars, came from two sources: the World Bank website and the United Nations data website. Gaps in the World Bank's data were supplemented with information from the United Nations' website. Military spending, along with the national capabilities index, came from the Correlates of War data website. I used the logarithm of both GDP per capita and military spending in my analysis, since both should have decreasing effects on the likelihood of conflict as each variable nears its maximum values.

Contiguity was collected from the Correlates of War database, and the contiguity data identify the number of surrounding nations a specific country is bordered by (Stinnett et al 2002). While the data can be broken down by land and sea categories, I combined all into a total number to represent the varied number of nations bordered by each individual country.

Suffrage also came from the Inter-Parliamentary Union database and publications. For each year analyzed, suffrage was measured as the number of years women have possessed the right to vote as of that year.

The presence of a female chief executive was coded as a dummy variable. To determine if a woman was acting as a female chief executive, I used the women identified as being a female president, acting president, prime minister, or acting prime minister for more than 50% of each

year. All data came from the Worldwide Guide to Women in Leadership website (accessed 20 August 2011). Nations led by a female chief executive for more than 50% of a year were coded as a one for every applicable year, while those led by a male chief executive were coded zero.

The type of democratic system also came from the United Nations' data website. Nations that are primarily parliamentarian may be associated with more support for the women and peace hypothesis via the parliament percentages than presidential systems, whereas nations with presidential systems may display stronger support for the hypothesis when executive cabinets are analyzed. Also, the election processes inherent in most parliamentarian systems versus the appointment processes utilized in presidential systems for a president's cabinet could produce different effects on a state's likelihood of violent interstate conflict. Two variables identify the system type: "SYSPRES," where Parliamentary systems are coded as "0" while presidential systems are coded as "1," and "SYSPAR" for the opposite case.

Executive cabinet data was analyzed in raw number format. The actual number of cabinet members varied by nation and year from source to source, and sometimes within years. I ran the analyses using both the raw number of female cabinet members as well as a percentage based on each country's average cabinet size, and the results did not change significantly. All results below are displayed with the raw number cabinet variable.

The mean, minimum, and maximum values for each variable are displayed in Table 4, on the next page.

**Table 4: Mean, Minimum, and Maximum Variable Values**

| Variable | Mean | Min | Max | Std deviation |
|---|---|---|---|---|
| GDP per capita | $4492.82 (2005 USD) | $52 (Nigeria 1974) | $44,871 (Switzerland 1995) | 7346.82 |
| Contiguity | 5.2 | 0 | 29 (Romania 1991) | 3.808 |
| Upper house % | 8.78% | 0% | 42.7% (Sweden 1999) | 9.13 |
| Lower house % | 8.98% | 0% | 36% (Netherlands 1998) | 9.12 |
| Total Parliament % | 9.47% | 0% | 42.69% (Sweden late 1990s) | 11.19 |
| Cabinet numbers | 0.8598682 | 0 | 9 (South Africa 1999) | 1.20 |
| Suffrage | 40.8 years | 0 years (Mexico: 1993) | 108 years (New Zealand 1893) | 23.57 |
| Military Spending ($1000 USD) | 6,344,459 | 0 | 322,365,000 (USA 2001) | 2,960,000.00 |
| System | 30 Presidential systems and 63 Parliamentarian systems | | | |

Coding the lower chamber variable became a concern. Using a zero to fill in missing data for unicameral systems could bias the data, and leaving the data as missing for the analysis also is problematic. To account for this, the PRLMNT variable—defined by the total women in both chambers divided by the total number in parliament—represents bicameral systems as well as unicameral ones without altering the nature of the data. Since the PRLMNT variable is derived from both houses, yet is equal to the upper chamber in unicameral systems, it must be employed alone in any data analysis. I also ran the logistic regression without this variable, using just the upper and lower chamber percentages, even with the presence of zeroes to represent missing data for the lower chamber (i.e., unicameral systems). This created some problems with the results, as I will discuss shortly. Using Stata, I ran correlation matrices to determine the relationship between the upper and lower chamber female percentages. Not surprisingly, they are somewhat

correlated, as displayed in Table 5, but not to the degree that their relationship should cause problems for running the analyses.

**Table 5: Correlation between Upper and Lower Chamber Percentages**

|  | Upper Chamber | Lower Chamber |
|---|---|---|
| Upper Chamber | 1.00 | 0.3306 |
| Lower Chamber | 0.3306 | 1.00 |

Interaction terms aid in the analysis of the effect each nation's general democratic system type—whether parliamentarian or presidential—has on its likelihood of conflict. These consist of each parliament percentage multiplied by the presidential or parliamentary system dummy variable for that nation, and the cabinet percentage multiplied by the presidential system dummy variable. I interacted the parliament percentage two separate ways to ensure any relationship was found.

To explore H2, the threshold effect, I created new variables to capture which country-years contained female percentages in either parliament or the cabinet that exceeded both 15% and 30%. For each country-year, any female percentage that reached or exceeded 30%, the number given by the United Nations as the critical percentage of women that should be reached for gender relations to change, was coded a "1" while all others were coded "0." I included a set of variables to test for the threshold effect at 15% as well. Interaction terms were then created by multiplying the threshold dummy variable with the actual percentage of women in each specific chamber for each year.

# Results Discussion

After running a time series cross section analysis in logit, I found some support for the women and peace hypothesis, specifically for Hypothesis 1. As described earlier, the effect that a higher percentage of women in parliament has on the likelihood of violent interstate conflict is

relatively small, when compared to known explanatory variables such as contiguity and military spending. However, even when controlling for these effects, the results offer a solid argument that the percentage of women in parliament matters.

Using the logit estimation and clustering the standard errors for the countries, I accounted for possible autocorrelation by lagging the dependent variable twice and adding it as an independent variable. Since I believe that the literature supports the idea that higher numbers of women are associated with a change in national norms that affects the likelihood of violent interstate conflict, I do not expect that lagging the effect of the parliament percentages will change the results. In other words, I do not believe the effect that women have in office will necessarily follow in trail of their elections by one, two, or five years. The literature seems to support the idea that certain norms are associated with greater gender equality in many ways; therefore, by the time increased numbers of women reach higher national office, changes that would affect the rate of armed conflict may already be in place.

I ran the regression with the PRLMNT and CABINET variables initially, as opposed to using the individual variables for each chamber of parliament, and found moderate support for the women and peace hypothesis. The overall percentage of women in parliament has a significant impact on a nation's likelihood of experiencing violent conflict. As expected, as the percentage of women in parliament increases, the likelihood of entering a conflict decreases. The cabinet variable failed to reach significance, and the coefficient was in the opposite direction from what was expected. The results of this initial regression are displayed in Table 6.

**Table 6: Application of Parliament and Cabinet**

| Variable | Coefficient | Std Error |
|---|---|---|
| MID L1 | 2.1255*** | 0.1678 |
| MID L2 | 0.9199*** | 0.2005 |
| Contiguity | 0.0741*** | 0.0199 |
| Military Expend. | 0.1032** | 0.0421 |
| logGDP | 0.0501 | 0.0435 |
| System | -0.3737* | 0.1866 |
| Parliament | -0.0267** | 0.0094 |
| Cabinet | 0.0615 | 0.0694 |
| Female chief | 0.3800 | 0.3010 |
| Suffrage | -0.0022 | 0.0049 |
| Constant | -4.0807 | 0.5214 |
| Pseudo $R^2$ = 0.2744 | | |
| Wald $chi^2$ = 363.54*** | | |
| N = 2697 | | |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

The coefficients are given in log odds, so converting them to odds ratios instead gives a better idea of how each independent and control variable affects the dependent variable. For the analysis above, the odds ratio for the PRLMNT variable is 0.974, which means that for every increase in the percentage of women in parliament by one, a nation is 0.974 times more likely to experience violent interstate conflict. For comparison, an increase in contiguity of one increases the likelihood of a nation experiencing violent conflict by 1.076, which is the odds ratio for contiguity.  This shows that increasing the numbers of women in parliament decreases the likelihood of violent conflict, but increasing the women in the executive cabinet actually increases the likelihood of conflict. However, a number of variables were left out from this initial analysis: separate variables for the upper and lower chambers, the interaction of democratic system type with parliament or the executive cabinet, and any testing for the threshold effect.

Running the analysis again, but dropping the insignificant SUFFRAGE and FEMCHIEF variables again yields some moderate support for the hypothesis, as described in Table 7:

**Table 7**

| Variable | Coefficient | Std Error |
|---|---|---|
| MID L1 | 2.1256*** | 0.1682 |
| MID L2 | 0.9172*** | 0.2007 |
| Contiguity | 0.0728*** | 0.0204 |
| Log GDP | 0.0406 | 0.0384 |
| Log Mil Exp | 0.1000* | 0.0429 |
| System | -0.3660* | 0.1895 |
| Parliament | -0.0279** | 0.0089 |
| Cabinet | 0.0637 | 0.0670 |
| Constant | -4.0322*** | 0.5156 |
| Pseudo R$^2$ = 0.2736 | | |
| Wald chi$^2$ = 334.90*** | | |
| N = 2389 | | |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

Converting these numbers to odds ratios from the given log odds yields:

**Table 8: Conversion to odds ratios**

| Variable | Coefficient |
|---|---|
| MID L1 | 8.3776*** |
| MID L2 | 2.5022*** |
| Contiguity | 1.0755*** |
| Log GDP | 1.0415 |
| Log Mil Exp | 1.1052* |
| System | 0.6935* |
| Parliament | 0.9725** |
| Cabinet | 1.0658 |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

For every one-unit increase in the percentage of women in a nation's upper chamber of
parliament, that nation is 0.97 times more likely to experience a violent interstate conflict. The
likelihood of conflict decreases, since the odds ratio is less than one. For comparison, the
contiguity variable shows that for a one-unit increase in contiguity, a nation is 1.08 times more
likely to experience conflict. Interestingly enough, while I did not include the system interaction
terms on this regression, the system variable itself is both significant—with the sign in the
expected direction—and relatively large. Changing from a presidential system to a parliamentary

one makes a nation 0.69 times more likely to proceed to violent conflict. In other words, it decreases the likelihood of conflict. This deserves further examination.

Dropping the insignificant suffrage and female chief executive variables from the regression has little effect on the results. All other variables remain significant, coefficient signs do not change, and the log odds and odds ratios shift only slightly.

Adding in the national capabilities index does not alter the results much, but the capabilities index proves significant as well, as shown below in Table 9:

**Table 9: Analysis with CINC variable**

| Variable | Coefficient | Std Error |
|---|---|---|
| MID L1 | 2.1081*** | 0.1688 |
| MID L2 | 0.8940*** | 0.1957 |
| Contiguity | 0.0786*** | 0.0194 |
| Log GDP | 0.0112 | 0.0401 |
| Log Mil Exp | 0.1590** | 0.0489 |
| CINC | -8.4523* | 4.3447 |
| System | -0.3994* | 0.1828 |
| Parliament | -0.0275** | 0.0086 |
| Cabinet | 0.0584 | 0.0691 |
| Constant | -4.5297*** | 0.5671 |
| Pseudo $R^2$ = 0.2759 | | |
| Wald chi$^2$ = 326.22*** | | |
| N = 2389 | | |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

Again converting log odds to odds ratios, for the significant values we see:

**Table 10: Conversion to odds ratios**

| Variable | Coefficient |
|---|---|
| MID L1 | 8.2326*** |
| MID L2 | 2.4450*** |
| Contiguity | 1.0817*** |
| Log GDP | 1.0113 |
| Log Mil Exp | 1.1723** |
| CINC | 0.0002* |
| System | 0.6707* |
| Parliament | 0.9728** |
| Cabinet | 1.0602 |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

Swapping out the separate upper and lower chamber variables for the Parliament variable yields very similar results, except that the lower chamber is insignificant, and its coefficient is positive, which is not expected. Also, the CINC variable drops just out of significance, while retaining a negative coefficient. The results are displayed in Table 11, below:

**Table 11: Analysis with Separate Upper and Lower Variables**

| Variable | Coefficient | Std Error |
|---|---|---|
| MID L1 | 2.1017*** | 0.1685 |
| MID L2 | 0.8749*** | 0.1939 |
| Contiguity | 0.0735*** | 0.0199 |
| Log GDP | 0.0148 | 0.0404 |
| Log Mil Exp | 0.1522** | 0.0507 |
| CINC | -7.3223 | 4.5051 |
| System | -0.3378* | 0.1822 |
| Upper | -0.0342** | 0.0101 |
| Lower | 0.0007 | 0.0131 |
| Cabinet | 0.0772 | 0.0674 |
| Constant | -4.4613*** | 0.5985 |
| Pseudo $R^2$ = 0.2765 | | |
| Wald $chi^2$ = 340.00*** | | |
| N = 2389 | | |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

The odds ratios tell a similar story:

**Table 12: Conversion to odds ratios**

| Variable | Coefficient |
|---|---|
| MID L1 | 8.1799*** |
| MID L2 | 2.3986*** |
| Contiguity | 1.0762*** |
| Log GDP | 1.0149 |
| Log Mil Exp | 1.1643** |
| CINC | 0.0007 |
| System | 0.7133* |
| Upper | 0.9663** |
| Lower | 1.0007 |
| Cabinet | 1.0802 |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

The results clarify the importance of military spending as a predictor of violent interstate conflict, but even while holding military spending, GDP, contiguity, and democratic system type

constant, the percentage of women in the upper and lower chambers of parliament matters. The lower chamber loses that significance, and the coefficient is always positive—and the odds ratio larger than one—so its effect is not precisely as expected. I will discuss this in more detail in the conclusion, and will examine it in additional analyses below. The significance of the overall Parliament variable—and the fact that the Parliament coefficient is negative—means that the percentage of women in parliament matters when examining rates of violent conflict; something else could be affecting the way the lower cabinet is analyzed here.

The democratic system type plays more of a role in determining the likelihood of violent interstate conflict than I initially expected it to. Since the majority of the nations being analyzed at any given time are democracies, and all achieve democratic status for at least a portion of the 31 years studied, I did not expect system to affect the likelihood of conflict on its own; its importance instead was expected to impact the results via interaction with either the parliament variables or the executive cabinet ones. Yet when used alone, without interacting with the system-specific variables, the type of system is consistently significant. Parliamentary systems demonstrated an overall lower likelihood of conflict. It is worth noting that the U.S. data alone could be responsible for the greater likelihood of violent conflict displayed by presidential systems.

Running the regression with the addition of the system interaction variables shows that when parliamentary systems are interacted with the average percentages of women in parliament they are both significant and correctly signed. Increased numbers of women in parliament are significantly related to a decrease in the likelihood of violent conflict in parliamentary systems. And while the executive cabinet variable, interacted with presidential system type, did not exhibit significance, it was negatively signed. This indicates that while an increased percentage

of women on a nation's executive cabinet increases the likelihood of violent conflict for all democratic nations, for presidential systems the opposite is true. Increasing the number of women on the executive cabinet in a presidential system lowers the likelihood of violent conflict. These results are given in tables 13 and 14.

**Table 13: Analysis with System Interaction Terms**

| Variable | Coefficient | Std Error |
|---|---|---|
| MID L1 | 2.0974*** | 0.1691 |
| MID L2 | 0.8804*** | 0.1946 |
| Contiguity | 0.0813*** | 0.0194 |
| Log Mil Exp | 0.1635*** | 0.0450 |
| CINC | 8.8687* | 3.8238 |
| Parliament | -0.0043 | 0.0156 |
| Cabinet | 0.1368 | 0.1033 |
| Parl. x System | -0.0282* | 0.0159 |
| Cab. x System | -0.1388 | 0.1205 |
| Constant | -4.7794*** | 0.5381 |
| Pseudo $R^2$ = 0.2772 | | |
| Wald chi$^2$ = 323.00*** | | |
| N = 2389 | | |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

**Table 14: Conversion to odds ratios**

| Variable | Coefficient |
|---|---|
| MID L1 | 8.1453*** |
| MID L2 | 2.4119*** |
| Contiguity | 1.0847*** |
| Log Mil Exp | 1.1776*** |
| CINC | 0.0001* |
| Parliament | 0.9957 |
| Cabinet | 1.1465 |
| Parl. x System | 0.9722* |
| Cab. x System | 0.8704 |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

Any interaction effect that system has with either the parliament percentages or the executive cabinet ones pales in comparison to the overall effect of system as a standalone variable. Reviewing the results of Tables 11 and 12 shows that the type of system matters just as contiguity, military spending, and GDP do. The odds ratio results illustrate that moving from a

presidential system to a parliamentary one makes a nation 0.71 times more likely to experience violent interstate conflict, decreasing the likelihood of conflict. Compare this to military spending: an increase in logged military spending by one unit makes a nation 1.18 times more likely to enter a conflict.

H1 seems to be supported. Granting the idea—which seems bolstered by the results—that a great deal more than the gender of national leaders goes into circumstances that lead to violent interstate conflict, we still see some moderate effects from the presence of women in parliament, regardless of system type, and on the executive cabinet for presidential systems, although the latter does not approach significance.

H2 is a different story. Much like Melander (2005), Caprioli (2000), and Caprioli and Boyer (2001) found, there is little support for any kind of threshold effect. Running the analysis with the 30% interaction term and then the 15% interaction term, to account for the diverse descriptions of what constitutes a true threshold, the threshold effect fails to approach significance in either format; the coefficients' signs are generally not even in the expected direction. Tables 15 and 16 display the results. Running the analysis with the upper and lower chamber variables rather than the parliament variable does not alter the substance of the results.

**Table 15: Analysis with 30% Threshold Interaction Terms**

| Variable | Coefficient | Std Error |
|---|---|---|
| MID L1 | 2.1043*** | 0.1684 |
| MID L2 | 0.8901*** | 0.1945 |
| Contiguity | 0.0779*** | 0.0195 |
| Log GDP | 0.0162 | 0.0403 |
| Log Mil Exp | 0.1593** | 0.0490 |
| CINC | -8.6428* | 4.3753 |
| System | -0.3964* | 0.1823 |
| Parliament | -0.0351** | 0.0130 |
| Parl x thresh | 0.0100 | 0.0115 |
| Cabinet | 0.0707 | 0.0735 |
| Cab. x thresh | -0.0065 | 0.0164 |
| Constant | -4.5218*** | 0.5709 |
| Pseudo $R^2$ = 0.2762 | | |
| Wald $chi^2$ = 334.73*** | | |
| N = 2389 | | |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

**Table 16: Conversion to odds ratios**

| Variable | Coefficient |
|---|---|
| MID L1 | 8.2016*** |
| MID L2 | 2.4354*** |
| Contiguity | 1.0810*** |
| Log GDP | 1.0164 |
| Log Mil Exp | 1.1726** |
| CINC | 0.0002* |
| System | 0.6728* |
| Parliament | 0.9655** |
| Parl x thresh | 1.0101 |
| Cabinet | 1.0733 |
| Cab. x thresh | 0.9935 |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

Running the analysis with a 15% threshold produces the below results:

**Table 17: Analysis with 15% Threshold Interaction Terms**

| Variable | Coefficient | Std Error |
| --- | --- | --- |
| MID L1 | 2.1101*** | 0.1681 |
| MID L2 | 0.8989*** | 0.1953 |
| Contiguity | 0.0782*** | 0.0193 |
| Log GDP | 0.0121 | 0.0397 |
| Log Mil Exp | 0.1588** | 0.0489 |
| CINC | -8.4849* | 4.3627 |
| System | -0.4063* | 0.1842 |
| Parliament | -0.0296 | 0.0197 |
| Parl x thresh15% | 0.0018 | 0.0157 |
| Cabinet | 0.1056 | 0.0950 |
| Cab x thresh15% | -0.0097 | 0.0159 |
| Constant | -4.5424*** | 0.5791 |
| Pseudo $R^2$ = 0.2760 | | |
| Wald chi$^2$ = 351.54*** | | |
| N = 2389 | | |

*p <0.05, one-tailed test, **p <0.01, one-tailed test, ***p <0.001, one-tailed test

H2 is not supported by the results. Women do impact the likelihood of violent conflict as their numbers increase—albeit not exactly as expected—but once the female percentage in a chamber hits either 15% or 30%, that impact does not significantly change. As this is in keeping with the results found in previous studies, this is not a total surprise.

While using logistic regression does not allow for a true goodness-of-fit measure such as $R^2$, Table 18 (below) lists the measures of fit for the overall model, minus the threshold effect variables:

**Table 18: Goodness-of-fit Measures for Main Model**

| | |
| --- | --- |
| McFadden's $R^2$ | 0.276 |
| Cox-Snell $R^2$ | 0.234 |
| Nagelkerke $R^2$ | 0.378 |

H1 is moderately supported by the analysis and results. No matter which way we analyze the data, the percentage of women in a nation's parliament has a moderate effect on the likelihood that said nation will experience violent interstate conflict. The lower chamber's

significance varies by analysis, and its sign is consistently in the opposite direction of what was expected. This could be due to bias stemming from the way the LOWER variable was coded. A limitation of the analysis method is that I could not analyze the lower chamber with missing data. While unicameral chambers are not technically "missing" the data for the lower chamber, since they do not have one, it still could represent a lost opportunity for women to affect national policy. Keeping this in mind, I chose to fill in these specific observations with zeroes to account for this problem, and that may have affected the results. Ideally, this method should actually make it easier for any relationship to be discerned, since any increase in lower chamber percentage would be associated with a relatively greater increase due to these zero terms, but no relationship surfaces except for the occasional one in the opposite direction than expected. While the percentage of women in parliament does not affect the likelihood of conflict to the degree that military spending, democratic system, or contiguity do, that percentage still has the ability to change things. And while the executive cabinet numbers do not significantly change things, once interacted with presidential system type they seem to act as expected, although not significantly.

Two other variables behaved oddly. Suffrage made no difference at all. It consistently failed to achieve significance, although the coefficient indicated that it has a negative effect on the likelihood of conflict. Taking the suffrage variable out of the analyses did not alter the substance of the results. The presence of a female chief executive, annotated by the use of a simple dummy variable, also had little effect. It never reached significance, and the coefficient was generally not in the expected direction (i.e., negative). Earlier studies also found little support for the effect of a female chief executive on the likelihood of peace or war (Melander 2005), so this result is not wholly unexpected. Even though the world has seen more female leaders in the last decade, the numbers are still so small that any meaningful analysis of their

52

effects may be out of reach for some time, and female chief executive do not necessarily act as expected, as noted in the literature (Burwell and Sarkees 1993; Swers 2007).

## Discussion and Future Research

This research was conducted to discover more meaningful, comprehensive support for the women and peace hypothesis in the hopes of eventually solidifying the causal mechanism and providing an emphatic, critical reason to promote the inclusion of women at higher levels of national office. The literature suggests a number of relevant points; foremost is the idea that feminist theories and gender-based stereotypes—along with the persistent observation of a policy-based gender gap—point to the idea that women tend to seek out, support, and identify with policies that promote peace (Bendyna and Finucane 1996; Caprioli 2000; Caprioli and Boyer 2001; Conover 1988; Conover and Sapiro 1993; Eichenberg 2003; Hudson et al 2008; Ruddick 1983; Wilcox, Hewitt, and Allsop 1996). However, conflicting and contradicting theories, analyses, and results make generalization of this concept impractical, not to mention incredible. Women who attain higher levels of office may not hold the same beliefs or promote the same policies as ordinary female citizens do (Swers 2007). Politics may play more of a role in different countries, based on the way each national government is set up. When job security is on the line, would women still choose peace over conflict? Too many confounding factors interfere to make this likely every time.

The results I observed do not point with any clarity to an obvious causal mechanism. If, as I hypothesized, increasing percentages of women in the executive cabinet decrease the likelihood of violent conflict, the causal mechanism I discussed—that the presence of women is actually a side effect of changing national norms—would be easier to agree with. But the results

are not that clear. The moderate support I did find, especially when interacting female

percentages with democratic system type, does not rule out any specific causal mechanism, but it

does give added support to the women and peace hypothesis. Future scholars could consider

working with a dependent variable such as the Global Peace Index, which uses 24 separate

variables to determine a measure of state peacefulness (Hudson et al 2008). Using the MID

database measures a lack of conflict, or a lower rate of violent conflict, but measuring

peacefulness could result in a different outcome entirely.

I pointed out the difficulty with the lower chamber variable, and how my

operationalization of this variable could affect the results. While some of the analyses found the

lower chamber to be a significant variable in predicting conflict, the vast majority of the results

showed that the lower chamber was both insignificant and signed the opposite as hypothesized.

The support that the parliament variable uncovered, however, causes doubts about the need to

separate the chambers for bicameral nations. Later analyses could examine the percentages of

women on critical committees within individual parliaments, or perhaps examine absolute votes

on use-of-force issues to determine how women are actually voting.

I also encountered problems coding the percentage of female executive cabinet members.

My inability to identify an actual percentage of women in each cabinet could prohibit the

variable from acting as I intended. Another way to examine the executive cabinet could be to

separate single-party from coalition-party governments. Identifying a few key cabinet

members—State, Defense, Treasury, and so on—and using only those in the analysis might

change the results, or examining ambassadors in nations that experience conflict with each other

(Burwell and Sarkees 1993). Koch and Fulton (2011) used specific cabinet members in their

2011 analysis, and found some support for a positive relationship between these members and

their influence on a nation's likelihood of armed conflict. They also found that executive branch members tended to be associated with more conservative, defense-centric policies, as opposed to the more pacific impacts brought on by increasing women in parliament, although their analysis only included a handful of democratic nations (Koch and Fulton 2011).

The executive cabinet variable represents a weakness in the research that should be addressed in future studies. Perhaps these women act more like female chief executives than like a stereotypical female, thus erasing any effect their gender (or what their gender represents) would cause. Studies focusing on the gender gap among political players have found some support for this concept: in a study of policymakers at the U.S. Departments of State and Defense, scholars found that women actually chose the less peaceful, more conservative policies in greater numbers than their male colleagues did (Burwell and Sarkees 1993, 132). Koch and Fulton (2011) hypothesized and found similar results. Another answer could be that there simply have not been enough female cabinet members in key offices to properly analyze yet.

Endogeneity remains a problem. While I added the lagged the dependent variable twice, including it as another independent variable, this does not necessarily solve all endogeneity concerns. Future research could address this problem by using simultaneous equation models. Also, I did not draw a distinction between new conflicts and ongoing ones, or between instigators and others. These could make a difference, and both of those areas represent concerns that future studies should address.

As mentioned, the qualified results do not rule out norm shifts as a causal mechanism; they simply do not identify changing norms as an obvious answer. The literature still supports this argument. As Tessler and Warriner (1997) found, along with Tessler, Nachtwey, and Grant (1999), feminist norms and beliefs can be associated with peace in instances where gender as a

standalone variable may not be. Is it because women are being heard in places where gender equality—and feminist norms—have taken root and achieved credibility? Is it because women are actually voting for more peaceful alternatives? Or, as Melander (2005) mentions, is the presence of higher levels of women in nations with lower rates of conflict actually a spurious relationship, due to the increasing presence of more humanitarian (more feminist?) norms that increased female leaders represent?

We may not find the answer easily, and even if we do it could be a chicken-or-egg type of answer. Do women in higher office get elected or appointed because nations experience norms shifts that allow for such instances? Or do women manage to get elected and then slowly bring about a norm shift among their colleagues and constituents? There is some support for the latter mechanism in studies among militaries and police forces, showing that as women entered the military and the police force, methods have changed somewhat to emphasize alternative options to violence (Howes and Stevenson 1993, p. 213). Regardless, this research identifies more support for the women and peace hypothesis. While the effect is not as strong as other variables, in the area of violent conflict no influence should be overlooked. Further research is, as always, warranted. Perhaps an examination of all recorded interstate conflicts, regardless of violence level, would uncover more detail. The operationalization I employed best addresses the research question, since women do not necessarily hold different policy preferences than men at lower levels of conflict: it is their lower support for the use of military force and the female aversion to warfare that drive the women and peace hypothesis. Seeking out alternatives to violence is a hallmark of the female stereotype, so distinguishing between conflicts that fall on either side of the fine line between threats and actual violence is a key part of the hypothesis. However, it is a clear weakness of this analysis that the information contained in a 21-point scale from the MID

dataset is reduced to a dichotomous variable. The information lost in that translation could offer a stronger case for or against the hypothesis if included. Also, I did not account for nations that had more than one MID per year, especially MIDs of similar hostility levels. For this analysis, I chose to use the highest act for each year as a representative of the violence inherent in each country-year. In doing so, information on multiple MIDs or multiple hostility levels is lost. A future analysis could include a study of the number of hostile acts as well as changes over time in each conflict, comparing them to the percentages of female leaders.

Running this analysis in 50 more years will hopefully uncover a stronger relationship, perhaps the relationship hinted at now, if women are often agents of change at a national level. Former Chairman of the Joint Chiefs of staff John Vessey, Jr., commented that "the influx of women has brought greater change to the U.S. military than the introduction of nuclear weapons" (Carroll and Hall 1993, p. 19). Maybe future female leaders will respond as Golda Meir did to the question of leading a nation at war, when she explained, "When people ask me…if I am afraid, because of Israel's need for defense, that the country may become militaristic, I can only answer that I don't want a fine, liberal, anticolonial, antimilitaristic, dead Jewish people" (Richardson and Howes 1993, p. 151). Will the responsibilities of the office supersede norms and erase any gender differences at higher levels? Possibly future leaders will instead agree with Elizabeth Cady Stanton, who argued that, "That great conservator of woman's love…would hold all these destructive forces in check, for woman knows the cost of life better than man does, and not with her consent would one drop of blood ever be shed, one life sacrificed in vain" (Gallagher 1993, p. 23). Time will tell the answer, and maybe the two statements are not mutually exclusive. In the meantime, this analysis lends support to the idea that electing or appointing women to higher national offices can bring a nation a bit closer to peace.

# Bibliography

Alexander, Deborah, and Kristi Andersen. 1993. "Gender as a Factor in the Attribution of Leadership Traits." *Political Research Quarterly* 46 (Sept): 527-545.

Beaman, Lori, Esther Duflo, Rohini Pande, and Petia Topalova. 2006. "Women Politicians, Gender Bias, and Policy-Making in Rural India." UNICEF Background Paper. New York: United Nations International Children's Emergency Fund.

Beckwith, Karen. 2002. "Women, Gender, and Nonviolence in Political Movements." *PS: Political Science and Politics* 35 (March): 75-81.

Beckwith, Karen. 2007. "Numbers and Newness: the Descriptive and Substantive Representation of Women." *Canadian Journal of Political Science* 40 (March): 27-49.

Bendyna, Mary E. and Tamara Finucane. 1996. "Gender Differences in Public Attitudes Toward the Gulf War: A Test of Competing Hypotheses." *Social Science Journal* 33 (1): 1-22.

Box-Steffensmeier, Janet M, Suzanna de Boef, and Tse-Min Lin. 2004. "The Dynamics of the Partisan Gender Gap." *The American Political Science Review* 98 (August): 515-528.

Bremer, Stuart A. 1992. "Dangerous Dyads: Conditions Affecting the Likelihood of Interstate War, 1816-1965." *The Journal of Conflict Resolution* 36 (June): 309-341.

Burwell, Frances G. and Meredith Reid Sarkees. 1993. "Women and National Security Policy." In *Women and the Use of Military Force*, eds. Ruth H. Howes and Michael R. Stevenson. Boulder, CO: Lynne Rienner Publishers, Inc., p. 111-133.

Bystydzienski, Jill M. 1993. "Women in Groups and Organizations: Implications for the Use of Force." In *Women and the Use of Military Force*, eds. Ruth H. Howes and Michael R. Stevenson. Boulder, CO: Lynne Rienner Publishers, Inc., p. 39-52.

Caprioli, Mary. 2000. "Gendered Conflict." *Journal of Peace Research* 37 (Jan): 51-68.

Caprioli, Mary. 2005. "Primed for Violence: the Role of Gender Inequality in Predicting Internal Conflict." *International Studies Quarterly* 49: 161-178.

Caprioli, Mary, and Mark A. Boyer. 2001. "Gender, Violence, and International Crisis." *The Journal of Conflict Resolution* 45 (Aug): 503-518.

Carpenter, Charli. 2011. "Flight of the Valkyries?" *Foreign Affairs* online version: http://www.foreignaffairs.com/ articles/67680/charli-carpenter/flight-of-the-valkyries. Accessed March 29, 2011.

Carroll, Berenice, and Barbara Welling Hall. 1993. "Feminist Perspectives on Women and the Use of Force." In *Women and the Use of Military Force*, eds. Ruth H. Howes and Michael R. Stevenson. Boulder, CO: Lynne Rienner Publishers, Inc., p. 11-21.

Cindy Sheehan CNN article. http://articles.cnn.com/2005-08-18/politics/crawford. protest_1_ gold-star-families-crawford-protest-cindy-sheehan?_s=PM:POLITICS. May 7, 2011.

Code Pink website. http://www.codepink4peace.org/ May 7, 2011.

Conover, Pamela Johnston. 1988. "Politics and the Gender Gap." *The Journal of Politics* 50 (Nov): 985-1010.

Conover, Pamela Johnston and Virginia Sapiro. 1993. "Gender, Feminist Consciousness, and War." *American Journal of Political Science* 37 (Nov): 1079-1099.

Cook, Elizabeth Adell and Clyde Wilcox. 1991. "Feminism and the Gender Gap—A Second Look." *The Journal of Politics* 53 (Nov): 1111-1122.

Correlates of War Project. *Direct Contiguity Data, 1816-2006.* Version 3.1. Online: http://correlatesofwar.org. August 20, 2011.

DeMesquita, Bruce Bueno, James D. Morrow, Randolph M. Siverson, and Alastair Smith. 1999. "An Institutional Explanation of the Democratic Peace." *The American Political Science Review* 93 (December): 791-807.

Eichenberg, Richard C. 2003. "Gender Differences in Public Attitudes toward the Use of Force by the United States, 1990-2003." *International Security* 28 (Summer): 110-141.

Enloe, Cynthia. 2007. *Globalization and Militarization: Feminists Make the Link*. Lanham, MD: Rowman and Littlefield Publishers, Inc.

Enloe, Cynthia. 2010. *Nimo's War, Emma's War*. Berkeley, CA: University of California Press.

Fordham, Benjamin O. 2004. "A Very Sharp Sword: the Influence of Military Capabilities on American Decisions to Use Force." *The Journal of Conflict Resolution* 48 (Oct): 632-656.

Fukuyama, Francis. 1998. "Women and the Evolution of World Politics." *Foreign Affairs* 77 (5): 24-40.

Gallagher, Nancy W. 1993. "The Gender Gap in Popular Attitudes Toward the Use of Force." In *Women and the Use of Military Force*, eds. Ruth H. Howes and  Michael R. Stevenson. Boulder, CO: Lynne Rienner Publishers, Inc., p. 23-38.

Ghosn, Faten, Glenn Palmer, and Stuart Bremer. 2004. "The MID3 Data Set, 1993–2001: Procedures, Coding Rules, and Description." *Conflict Management and Peace Science* 21:133-154.

Gray, Mark M., Miki Caul Kittilson, and Wayne Sandholtz. 2006. "Women and Globalization: A Study of 180 Countries, 1975-2000." *International Organization* 60 (Spring): 293-333.

Howes, Ruth H. and Michael R. Stevenson. 1993. "The Impact of Women's Use of Military Force." In *Women and the Use of Military Force*, eds. Ruth H. Howes and Michael R. Stevenson. Boulder, CO: Lynne Rienner Publishers, Inc., p. 207-217.

Huddy, Leonie, Erin Cassese, and Mary-Kate Lizotte. 2008. "Gender, Public Opinion, and Political Reasoning." In *Political Women and American Democracy*, eds. Christina Wolbrecht, Karen Beckwith, and Lisa Baldez. New York: Cambridge University Press, 31-49.

Hudson, Valerie M., Mary Caprioli, Bonnie Ballif-Spanvill, and Rose McDermott. 2008. "The Heart of the Matter: the Security of Women and the Security of States." *International Security* 33 (Winter): 7-45.

Jones, Daniel M., Stuart A. Bremer, and J. David Singer. 1996. "Militarized Interstate Disputes, 1816-1992: Rationale, Coding Rules, and Empirical Patterns." *Conflict Management and Peace Science* 15 (2): 163-213.

*The International Yearbook and Statesman's Who's-Who*. London: Burke's Peerage Ltd., 1953.

Kenworthy, Lane, and Melissa Malami. 1999. "Gender Inequality in Political Representation: A Worldwide Comparative Analysis." *Social Forces* 78 (Sep): 235-268.

Koch, Michael T. and Sarah A. Fulton. 2011. "In the Defense of Women: Gender, Office Holding, and National Security Policy in Established Democracies." *The Journal of Politics* 73 (1): 1-16.

Margaret Thatcher Website. http://www.margaretthatcher.org/essential/biography.asp Accessed August 20, 2011.

Melander, Erik. 2005. "Political Gender Equality and State Human Rights Abuse." *Journal of Peace Research* 42 (March): 149-166.

National Democratic Initiative for International Affairs Legislative Research Series Paper #3: "One Chamber or Two? Deciding Between a Unicameral and a Bicameral Legislature." http://www.accessdemocracy.org/files/029_ww_onechamber.pdf, accessed Sep 25, 2011.

Peterson, V. Spike and Anne Sisson Runyan. 2010. *Global Gender Issues in the New Millenium*. 3rd ed. Boulder, CO: Westview Press.

The Polity Index. http://www.systemicpeace.org/polity/polity4.htm. August 20, 2011.

Regan, Patrick M. and Aida Paskeviciute. 2003. "Women's Access to Politics and Peaceful States." *Journal of Peace Research* 40 (May): 287-302.

Ruddick, Sara. 1983. "Pacifying the Forces: Drafting Women in the Interests of Peace." *Signs* 8 (Spring): 471-489.

Shapiro, Robert Y. and Harpreet Mahajan. 1986. "Gender Differences in Policy Preferences: A Summary of Trends from the 1960s to the 1980s." *The Public Opinion Quarterly* 50 (Spring): 42-61.

Singer, J. David, Stuart Bremer, and John Stuckey. (1972). "Capability Distribution, Uncertainty, and Major Power War, 1820-1965." in Bruce Russett (ed) *Peace, War, and Numbers*, Beverly Hills: Sage, 19-48.

Smith, Tom W. 1984. "The Polls: Gender and Attitude Towards Violence." *The Public Opinion Quarterly* 48 (Spring): 384-396.

*The Statesman's Yearbook*. New York: St. Martin's Press, 1864.

Stinnett, Douglas M., Jaroslav Tir, Philip Schafer, Paul F. Diehl, and Charles Gochman. 2002. "The Correlates of War Project Direct Contiguity Data, Version 3." *Conflict Mangagement and Peace Science* 19(2):58-66.

Swers, Michelle. 2007. "Building a Reputation on National Security: the Impact of Stereotypes Related to Gender and Military Experience." *Legislative Studies Quarterly* 32 (November): 559-595.

Tessler, Mark and Ina Warriner. 1997. "Gender, Feminism, and Attitudes Toward International Conflict: Exploring Relationships with Survey Data from the Middle East." *World Politics* 49 (Jan): 250-281.

Tessler, Mark, Jodi Nachtwey, and Audra Grant. 1999. "Further Tests of the Women and Peace Hypothesis: Evidence from Cross-National Survey Research in the Middle East." *International Studies Quarterly* 43 (Sep): 519-531.

Togeby, Lise. 1994. "The Gender Gap in Foreign Policy Attitudes." *Journal of Peace Research* 31 (Nov): 375-392.

United Nations Data Website. http://data.un.org/Data. Accessed August 20, 2011.

United Nations Development Report, 1995.  http://hdr.undp.org/en/reports/global/hdr1995/.
      Accessed August 20, 2011.

United Nations Website on Women. http://www.un.org/womenwatch/feature/iwd
      Accessed August 20, 2011.

Vasquez III, Joseph Paul. 2005. "Shouldering the Soldiering: Democracy, Conscription,
      and Military Casualties." *The Journal of Conflict Resolution* 49 (Dec): 849-873.

Wilcox, Clyde, Lara Hewitt, and Dee Allsop. 1996. "The Gender Gap in Attitudes
      Toward the Gulf War: A Cross-National Perspective." *Journal of Peace
      Research* 33 (Feb): 67-82.

Wirls, Daniel. 1986. "Reinterpreting the Gender Gap." *The Public Opinion Quarterly* 50
      (Autumn): 316-330.

Women in Congress website.  http://womenincongress.house.gov/.  April 25, 2011.

Women in National Parliaments Data. Interparliamentary Union Website:
       http://www.ipu.org/wmn-e/classif.htm. Accessed August 20, 2011.

Women in Parliament in 2008: the Year in Perspective.  http://www.ipu.org/pdf/
      publications/wmn08-e.pdf.  Accessed August 20, 2011.

World Bank Data. http://data.worldbank.org/country.  Accessed August 20, 2011.

Worldwide Guide to Women in Leadership.  http://www.guide2womenleaders.com/index.html.
      Accessed August 22, 2011.

# Vita

The author was born in Metairie, Louisiana. She obtained her bachelor's degree in Oceanography from the United States Naval Academy in 1998. She joined the University of New Orleans political science graduate program to pursue a Master of Arts in political science.