

**The Female Impact:  
Gendered Effects on Congressional Behavior Over Time**

An Honors Thesis for the Department of Political Science

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## **Abstract**

As a nation, we stand far behind other progressive forces on the issue of gender equality, particularly in politics, where representatives' genders do not accurately reflect the gender makeup of our country. Thirty years ago around 7% of the House and 2% of the Senate were comprised of women. Today approximately 20% of the entire Congress consists of women. The gender divide has decreased, but there is still an extremely evident gap.

The purpose of my research was to answer the following question: How, if at all, has the increasing number of women in the US Congress over the past 25 years influenced the behavior of its members? In order to answer this question, I performed both quantitative and qualitative analysis. Specifically, I quantitatively analyzed gendered volubility in the Congressional chamber and the effectiveness of sponsorship and cosponsorship over time, while accounting for other demographic factors as well. I performed qualitative interviews on gendered legislative behavior with politicians and staffers involved in the legislative process.

My analysis allows us to understand the strength of gender's impact on Congressional behavior in a way that scholars of gender politics have not yet approached. I found that women sponsor and cosponsor increasingly more legislation over time in both the House and Senate. However the number of women in Congress did not have a significant impact on these trends. Additionally, neither men nor women are more effective in sponsorship or cosponsorship over time, and neither gender is consistently more effective than the other. My most striking results came out of my analysis on volubility, the amount of time spent talking. Women become more voluble over time. Men speak longer per speech but give fewer speeches per bill over time, and the number of women in Congress is a significant predictor of men's volubility trends. Moreover, women speak more on women's issues and hard-power issues over time. Men speak more on women's issues over time, but not on hard power issues. Therefore, my study suggests that the number of women in Congress does not necessarily have a significant impact on women's behavior, but it does influence the behavior of Congressmen.

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## **Chapter 1**

### **Introduction: The Importance of Understanding Gender Gaps in Congressional Behavior**

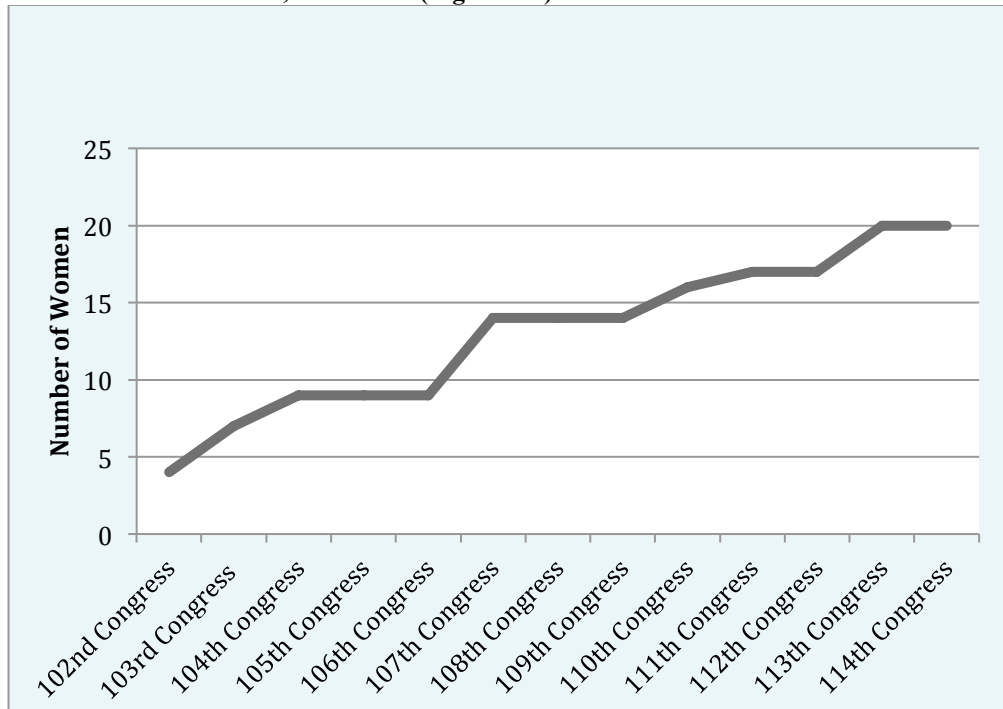
The United States stands far behind other progressive forces on the issue of gender equality, particularly in politics where representatives' genders do not accurately reflect the gender make-up of our country. Thirty years ago only around 7% of the House and 2% of the Senate were comprised of women. Today 19% of the House and 21% of the Senate consist of women. The gender divide has decreased, but there is still an extremely evident gap.

Multiple theories seek to explain not only how the legislative gender gap came about, but also how it affects the behavior of both women and men within Congress. Nonetheless, additional research is needed to put those theories to the test. The purpose of my research is to answer the following questions: How, if at all, has the increasing number of women in the US Congress over the past 25 years influenced the behavior of its members? How does female volubility change when more women occupy space in the Congressional Chamber? How are rates of sponsorship affected with more women in the Congressional environment? Does confidence among Congressmen and women in sponsorship and volubility change as women enter Congress? My research aids our understanding of both the decisions made by members of the US Congress and how females who do come into power interact with one another and with men.

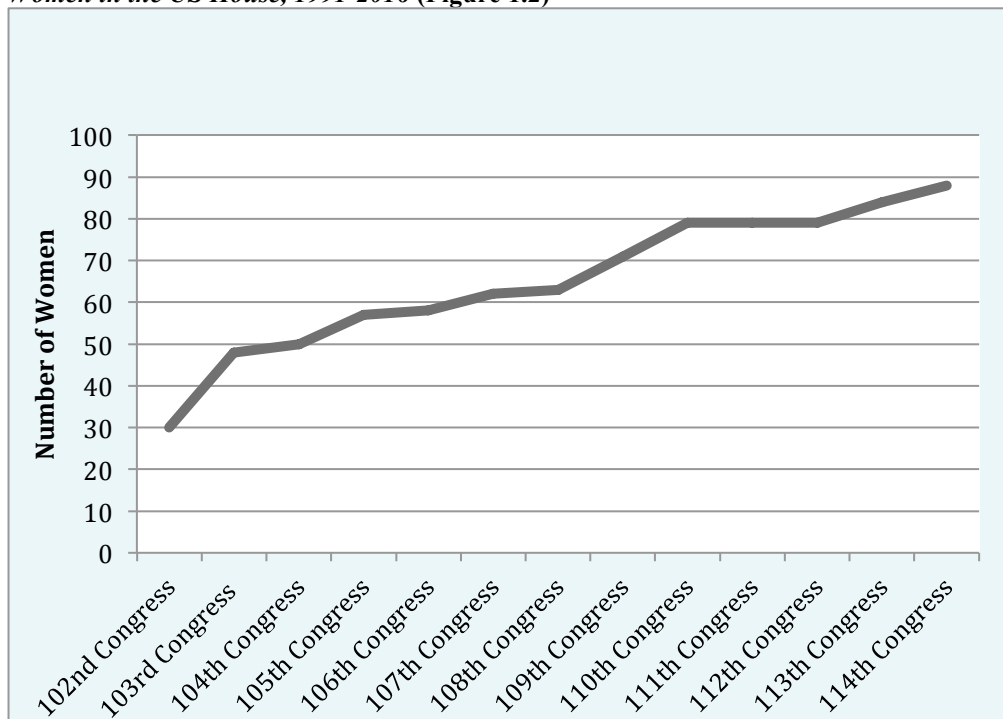
Figures 1.1 and 1.2 below show the magnitude of the increase of Congresswomen from 1991 until 2016 in the US Senate and House, respectively. These graphs illustrate how dramatic the increase was in such a short period of time. We must remember that as the number of women increases, the number of men decreases. An influx of females should therefore show changes in

male behavior as well. I would assume that if gender does have any impact on Congressional behavior, these increases and decreases would affect how decisions are made and the substance of those decisions on the Congressional floor.

***Women in the US Senate, 1991-2016 (Figure 1.1)***



***Women in the US House, 1991-2016 (Figure 1.2)***



In this thesis, I examine the correlation between the number of women in Congress and four specific aspects of legislative behavior:

- The number of bills that women sponsor and cosponsor
- The effectiveness of women's sponsorship and cosponsorship
- How often women speak on the floor
- How long women speak on the floor

I will compare these behaviors to those of male legislators over the same 25 years (1991-2016). Additionally, my focus is not merely on the gender of Congresswomen. I control for party, seniority, race, prior occupation, prior office, and the region from which members come, in order to account for other factors that could play a role in members' decision-making behavior.

My research yields a substantial amount of quantitative data on legislative behavior, but these numbers alone do not tell us why behavior changes with an increase in the number of women. In order to gain a richer understanding of the motives and calculations that underlie legislative behavior, I supplement the quantitative data with a qualitative approach through conducting interviews with legislators and their staff.

This two-part attempt at understanding gender equality in the legislature is not only important for the sake of government officials, but also for those who have not yet had the opportunity to consider being a part of our government, such as the average female citizen. We recognize the impact of gender inequality in representation on our daily lives, especially those of us who identify as the more marginalized gender. Women and men are not given an even playing field on which to live their lives. The majority of positions in the United States in which power is executed are ones that are held by men. Individuals who represent us tend to not be representative of the population. Our representative democracy was formed in order to ensure



that all individuals' voices were being heard, and that the freedoms they were granted were being protected by those representing them. When people are represented by politicians who prefer to protect some constituents more than others, individuals lose access to the freedoms they are granted. The greatest barrier to freedom is not created by laws, but rather by norms and biases within our society, which are perpetuated by many of those in power.

Until recently, politics appeared to be a game played by strong, typically white, wealthy, men. Congress was an arena of white men, protecting the interests of white men. When young women read about Congress or watched elections, the books and screens were dominated with the names and faces of men. Slowly though, as we see in Figure 1.1 and 1.2, male dominance in politics is changing, but the United States is currently ranked only 95<sup>th</sup> in the world for legislative gender equality. Testing the impacts of this gender gap helps us to grasp the importance of equality in the United States legislature.

This thesis consists of seven chapters, organized in the following manner. In Chapter 2, I review scholarly literature that examines gender inequality in the legislature and the male-female power dynamics in deliberative environments. Chapter 3 provides a description of my methodology, including the operationalization of the variables involved. Chapter 4 and 5 consist of data analysis. Chapter 4 is on legislative sponsorship, cosponsorship, and effectiveness. Chapter 5 is on the frequency and length of speeches on the floor. Chapter 6 offers an analysis of the interviews I conducted. I conclude with Chapter 7, ultimately finding that gendered behavior changes over time, but only in certain instances does the increasing number of women in Congress influence those changes.

## **Chapter 2**

### **Exploring Scholarship on a Gendered Congress and Deliberative**

### **Environments**

#### **Introduction**

Scholarship on gendered behavior in Congress focuses mainly on policy, but it fails to help us fully understand the internal processes that lead to the passage of policy. The gendered dynamics of deliberation are excluded from most research on Congress. Therefore, I surveyed literature not only concerning Congress, but also on deliberative environments and power dynamics. Additionally, there is a lack of scholarship on behavioral changes over time in Congress. However, existing literature explores the critical mass threshold, which is a point of contention among political scientists. This concept is an examination of how the increasing number of women in a legislative environment affects the legislative institution and the behavior within it.

I review three major scholarly themes in this section. First, I discuss research performed on policy, including the increase in legislation on women and minority interests, as well as the gender differences in legislative effectiveness. Second, I delve into the critical mass threshold and its contention among scholars, which leads to a discussion of critical actors and an updated understanding of critical mass. Third, I explain the literature on deliberative environments, gendered power dynamics, and backlash as a result of an increasing number of female voices. Finally, I consider the gaps in existing literature and ways in which my research begins to fill those gaps.

## **Policy Focus: Women's Issues and Legislative Behavior**

The majority of literature that examines the effects of gender on Congressional behavior directs its attention towards the types of policy that women support, offering a different definition for behavior than the one I present in chapter 3. Scholars pose three main hypotheses on women's behavior in Congress. First is the idea that Democratic women often endorse "women's issues," or issues surrounding social welfare, more than both men and Republicans in Congress (Swers 2013). Second, women are not only concerned with women's issues more than men are, but they also tend to be committed to these issues in particular (Jeydel and Taylor 2003). Third, women are more effective than men in the legislative process (Anzia and Berry 2011). At the end of this section, I discuss negative reactions to Congresswomen's behavior that scholars suggest could alter future behavior. In Chapter 4, I test the third hypothesis over time, but it is important for our understanding of gendered politics to address the first two as well.

Before reviewing attitudes towards women's issues, it is critical to note that the current Congress is extremely polarized. Recently, Congresswomen tend to veer less from party lines than they did in the past. This means that it is often challenging to see the effects of gender on the dependent variables of interest because party has such a strong influence on decision-making. And it is evident that the national parties are clearly split on issues that greatly concern women (Frederick 2011). When comparing the Democratic and Republican parties, female Democrats support and propose policies that represent women's interests more often than male Democrats and female Republicans, and far more frequently than male Republicans (Griffin et al. 2012).

Additionally, it is valuable to mention that women's interests are not necessarily what each individual woman in society wants. Women arise from varying backgrounds, just as men do, and therefore on each policy area there are going to be differing opinions among women.

Based on the literature, I define women's interests as concerns surrounding an attempt to increase women's choice and equality in the aggregate.

Despite the influence of parties, it does appear that women collaborate in order to help one another on a variety of issues, sometimes even crossing party lines to work towards legislation that they believe to be beneficial to their gender (Swers 2013). For example, Jeydel and Taylor (2003), in interviewing Senator Barbara Mikulski (D-MD), found that women oftentimes make policy without letting party preference interfere. They are, "more pragmatic and results oriented" (Jeydel and Taylor 2003). Additionally, a study performed on Congress in the mid-nineties reveals that women, on average, cosponsor women-related legislation far more than their male counterparts (Kliff 2016). This study demonstrates that female legislators are bound by their commitment to women's interests. While parties do play a large role in most decision-making, gender is still a factor in compromise and Congressional behavior.

The second main hypothesis in scholarship is that women are not only concerned with women's issues more than men are, but they also tend to be committed to these issues in particular. These are issues such as welfare for single mothers, reproductive rights, equal pay laws, and any issues that have a distinctly greater effect on women than men (Swers 2013). Despite being underrepresented in Congress, women use their commitment to push through their priorities. When women have no seat at the table, issues with which men otherwise would not be concerned go unaddressed. Therefore, the simple fact that Congresswomen can better relate to female constituents and their concerns means that Congresswomen can represent women's interests in policy-making (Griffin et al. 2012).

Findings by Griffin et al. (2012) on representation were grounded in roll-call voting. They examined how women voted on certain issues in comparison to men. Then they used these

results to demonstrate how support for various policy areas was expressed. This revealed the legislative subjects that women prioritize, but it excluded analysis of the behavior that created the policy, such as speeches and interactions in the deliberative environment. Therefore, it missed a large part of the puzzle that explains how well women are actually represented by women. Votes show the end results, not the process of representation. Swers (2013) does a better job at explaining a variety of ways, aside from just voting, in which the male-dominated institution oppresses the representation of women's issues. I discuss this question and Swers' explanation further below.

Third, while scholarship suggests that Congresswomen advocate more for policy that concerns females than Congressmen do, they also support general policies that affect the entire nation. They are not simply in Congress to represent their gender, especially because there are other parts of their identities and ideologies that they are concerned with representing. Jeydel and Taylor (2003) find that women are not only more effective in passing bills surrounding women's issues than men are in passing any type of legislation, but they also appear to be just as effective in passing all legislation brought to the floor. Women now make up just 21% of the Senate, and yet scholars suggest that they are just as effective at passing a bill into law as their male counterparts. Effectiveness is measured by members' level of influence in lawmaking, how they shape legislation, and overall influence on issues. Jeydel and Taylor (2003) measured the number of bills sponsored by both genders in one Congressional session and then how many of those bills actually passed into law. This analysis revealed that female members can be just as effective as Congressmen in supporting and creating passable legislation. The study was limited by the fact that it only examined one session and was unable to determine whether an increasing

number of women in Congress will change the effectiveness of either gender. I clarify this relationship in my research.

Anzia and Berry (2011) go further to show that Congresswomen outperform Congressmen. In a study examining both bill sponsorship and federal dollars delivered to the home district during one session, they demonstrate that women are more effective. Women, on average, sponsor more legislation and also bring back more federal dollars to their constituents. Anzia and Berry (2011) explain how women often endure more critique during campaigns, as well as once they enter office. Therefore, only the women who truly want to be in office and feel qualified enough to be there, end up there. Men are more confident about their abilities, and therefore less qualified men with great confidence end up in office, but they are often less productive than the females who fought to be there. This theory of effectiveness could also contribute to understanding how members of Congress behave while deliberating. The confidence that Anzia and Berry ascribe to men would appear to remain with men in their positions in the legislature. That is, more confident Congressmen may talk more than women. Therefore, they would have a greater impact on legislation purely through how frequently they speak. One might assume this would lead to more male legislative effectiveness, but as stated above, women who are elected are often more qualified to be there. Women most likely have a better grasp on legislation. In Chapter 4 and 5, I hypothesize that the increasing number of Congresswomen affects male confidence in the legislative process.

Additionally, as the number of women in Congress increases, men are also pushed to address women's issues (Swers 2013). While creating policy, women may place more emphasis on women's issues, but they manage to be very effective in creating that policy, despite the issues' focus on one gender. Women are able to bring their own preferences into the mix. If they

are adamant about addressing women's issues, then men either pay attention or ignore the preferences of a large part of their constituency. As elected officials, it is in Congressmen's best interest to not ignore their constituents. Therefore, they give more attention to women's issues than they would if women were not bringing these issues to the table. Additionally, women work to get the bills they sponsor passed into law at the same rate, or a faster rate, than men pass legislation (Jeydel and Taylor 2003). If men want to be as effective as women, then they must focus just as much attention towards women's interests as they would any other legislation. If Congressmen speak more on women's issues, this could signify that their attention to these issues has increased, which I test in Chapter 5.

Moreover, women are not only effective in passing policy, but they also open the range of issues that are discussed beyond just women's issues (Walsh 2002). Walsh (2002) explains how Congresswomen often bring marginalized groups into the conversation more often than men do, which adds to the range of representation. Women know how it feels to have perspectives different from men's, and therefore the duty they may feel to represent women extends to other marginalized groups as well, such as people of color who might have varying views from the typical white man in Congress (Walsh 2002). Women help to broaden the debate, which affects how members of Congress look at and vote on certain issues.

Lloren (2015) suggests that democracies are less advantageous for marginalized groups. Aside from women, marginalized groups tend to be a minority in the population. In a democracy it is much easier for the majority to be heard. The lack of a voice that these groups have within a democracy influences their minimal political engagement. When they engage less, they have even less representation. Women have been among these marginalized groups in politics, and therefore recognize the lack of representation. This causes Congresswomen to act as a

representative not only for women, but other groups marginalized by the political system (Lloren 2015).

In summary, Congresswomen in both parties work to pass legislation to which they are committed, often dependent on their gender. They also pass legislation for the rest of their constituencies, and they are effective in doing so. Women act as representatives for those who are often overlooked in the political system, which causes men to also pay attention to issues they otherwise might not. What is lacking from this scholarship is how the number of women changes the way women influence the advancement of women's issues and the concerns of marginalized groups. In the next section, I discuss the critical mass threshold, which explores how the number of women in Congress might affect policy. Through my research I demonstrate how the number of women over time affects the behavior that leads to the sponsorship and passage of legislation.

On the other hand, some scholars claim that women's preferences, or the way in which many Congresswomen push women's issues, is damaging to women. Women may lead differently than men and are perhaps more effective in working across the aisle, but Congress is an institution created by men. The socially constructed male qualities of competitiveness and individualism are often rewarded in Congress, which therefore means women either oppose this, facing resistance that causes them to become less effective, or they conform (Jeydel and Taylor 2003). Much of the evidence for this conformity in both Swers' research (2013) and Jeydel and Taylor's research (2003) comes from personal interviews with Congresswomen and men and their staff. What these interviews lack is more data on how female conformity has changed over time as women are influenced and supported by more women. This is why I analyze both interviews and the behavior within Congress over time. Moreover, scholars suggest that women



often surrender emphasis on issues they believe to be important in reaction to negative effects from resistance of norms. They downplay differences and ignore their socially constructed stereotypes of compassion and softness in order to meet Congressmen's standards (Swers 2013). As Swers explains (2013), women are often seen as soft on defense policy or national security issues. This means they are not as aggressively militaristic. Examining how Congresswomen speak about these bills over time can assist our understanding of whether the degree of conformity changes as more women enter the discussion.

Additionally, men in Congress often use women as what I interpret to be tools in order to gain support for issues within their own constituencies. While women work hard to not just be female senators, men often make that difficult for them, especially Republican men. Republicans are perceived as, "a bunch of middle-aged white men," and therefore they bring women to the forefront on certain issues to assure the population that they do not have biases against women (Swers 2013, p. 244). When women are tools, they perhaps focus less on issues they care about because they hope to fit into the norms of Congress, meaning they may sponsor less legislation. My hypothesis in Chapter 4 suggests that as more women enter Congress, it becomes harder for men to use women as tools. Instead of being cosponsors to men's legislation, women's own levels of sponsorship will increase. Difficulty arises when trying to determine what affects female sponsorship. Is it women's will to conform and fit in with the men? Or is it their own motivation as legislators? Or are the men manipulating the public perspective through the use of women as tools to make legislation look less male-centric? Analysis on why women behave the way they do requires a study occupying more time than I have. I discuss the "how" by showing ways that sponsorship increases or decreases based on gender across a period of 25 years. The

more legislation women sponsor over time, the more it would seem that women become more confident and are used less as tools, or engage less in conformity as cosponsors of legislation.

### **The Question of Critical Mass**

Prior research has shown that women are more effective legislators, but I turn now to the question of whether or not their effectiveness has a significant impact. We must remember that only around 20% of Congress currently consists of women. Even if that 20% effectively passes legislation, is it enough to show that women truly make a difference on the policy being passed through Congress? I focus on the critical mass threshold to elucidate the impact of an increasing number of women on legislative behavior. The critical mass threshold is the point at which minority representation creates a significant impact on legislation. Many scholars claim that this threshold is reached when 30% of the legislature consists of women, but others believe that women can affect politics in the legislature when their numbers reach the 15% mark (Wängnerud 2009).

It is important to question both what significance means and why there is a threshold. Below, I discuss the threshold in more detail, but first I focus on the idea of significance. Few scholars provide a detailed description of “significant impact”. These scholars claim that the number of women in a group is a part of creating a significant impact, but the exact number is never explicitly given. For the purpose of my research, I define significance as the point at which female members change the norms and standards of behavior surrounding the legislative process in Congress. They not only introduce and pass legislation that matters to them, but also alter the patterns of the institution in the passing of policy and their role as a minority in Congress.

Rosabeth Kanter (1977) elaborates on the idea of critical mass, explaining why the number of women might be related to their impact in the legislature. She introduces the idea of dominance in skewed sex ratios. Those who are greater in number are more dominant. They set the standards of the institution. I take this to mean that as the number of women increases, they gain dominance. They are therefore able to establish their own standards for behavior, which leads to new norms in the institution. I also assume that without dominance, it is more difficult to be confident in the decisions one makes because there is less of a guarantee that one's ideas will be supported. Therefore, I hypothesize in Chapters 4 and 5 that the larger the number of women in Congress, the more confidence those women have. In the following chapter I explain my methods for testing confidence over time as the number of Congresswomen increases.

The critical mass threshold is hotly debated among scholars. Arguments lie in both how many minority members is enough and whether this number makes a positive impact or ends up doing more harm to the minority group. Sandra Grey explains that the 30% figure was decided rather arbitrarily (2006). As stated above, some say it can be as low as even 15%. Rosabeth Kanter (1977) argues that even at 35% percent the minority can still be considered “tokens”. In short, there is no specific number that will inform us of when women will make a more significant impact. However, even without a specific number, an increase in the number of women has been shown to impact the way policy is discussed. For example, scholars in nations with quotas claim that the increasing number of women affects how gender is discussed in issues, even if that number does not reach the critical mass threshold range (Wängnerud 2009). Therefore, scholars suggest that tokens are generating some sort of impact that affects the norms of the legislative institution.

On the other hand, some scholars claim that whatever the percentage may be, crossing the threshold could result in more harm than good to women. Often, once women reach a significant number in a legislature, negative effects arise. Before understanding the negative effects of an increasing number of women, it is helpful to understand the way women are treated as the minority. As a small minority, women are considered tokens. They are, “treated as representatives of their category, as symbols rather than individuals” (Kanter 1977, p.966). Kanter (1977) explains that once women start to reach numbers around 35% of the group, they become part of skewed groups where they can potentially work together with the majority. And once women capture an equal number of seats in the legislature, they are balanced, but the actions within these balanced groups depend heavily on the individuals in the group.

In order to test if a critical mass of women affects legislatures, Kathlene Bratton (2005) studied women’s sponsorship levels and influence on the passage of women’s issues legislation in twelve state legislatures across four years: 1969, 1979, 1989, and 1999. Her results showed that women’s behavior did not significantly change over time as more women entered these bodies, but she did find that token women tend to be as, or more, successful than men in passing legislation. Additionally, women’s issues were discussed more as women entered the body (Bratton 2005). This is the only study I know of that examined legislative behavior over time in regards to a critical mass of women. However, only a small sample of state legislatures was examined and the focus of the research was primarily on women’s interests.

Currently, women in our Congress still fit in the percentage range where they can be considered token women. Sandra Grey (2006) explains that as tokens, these women help to create a veil of equality. If women are in the group, it appears as though their voices are being heard, and therefore the problem of gender inequality declines to an extent. Men use this to their

advantage, expressing to the public that Congress is no longer only a men's club. Yet, in these situations the number of women is so few that despite their small impact on legislation, there is no true change within the institution itself. Once females become vocal, and do not follow in line with typical male behavior or policy proposals, they receive backlash from men (Grey 2006). The greater the number of women, the more likely it is that this backlash will increase.

As women grow in numbers, some scholars claim that the harms of backlash could outweigh the benefits of changing legislative norms. Grey (2006) explains that the impacts of backlash could lead to a hostile environment both in the legislature and towards a feminist agenda, meaning an agenda that addresses women's interests. If a small number of women are effective in passing legislation that is meaningful for women specifically, then is achieving the critical mass and increasing backlash worth it? My research examines how the change from women playing primarily the role of tools in the way I described earlier, to a role in which there is the chance of facing severe backlash, affects their effectiveness over time, as well as how they speak, or their confidence on the Congressional floor.

As a result of considerable disagreement among scholars on the ambiguity of critical mass, Childs and Krook (2009) developed the concept of critical actors. Childs and Krook (2009) claim that there is no solid evidence to support the concept of critical mass because we cannot generalize all women as the cause for significant changes in Congressional behavior. Each woman has her own identity just as each man does, and therefore to say that simply the number of women will alter the institution, rather than individual women, is absurd. Critical actors are individuals who are able to bring about change that benefits women's interests (Childs and Krook, 2009). These scholars claim that being female does not mean an individual is necessarily advocating for women, and additionally, being male does not mean one ignores women's

interests. Certainly there are critical men and women that encourage progress in Congress, but I hold to my hypothesis that with a critical mass women can change the structure and internal behavior of the legislative institution. Individual identities are important factors in change, but what I hope to show through my research is that women's voices gain strength as more women enter Congress, which then affects the interactions in the institution.

In summary, the power of the critical mass threshold effect remains contested in the scholarly literature. Existing research has not yet established the exact ratio of women to men that causes this effect or how beneficial it would truly be to pass this threshold. There is no evidence showing that Congresswomen will necessarily make a positive or negative impact on the legislature as they increase in numbers. My research will test the hypothesis that there is a certain mass of women, whatever that percentage might be, which affects Congressional behavior in a significant way.

### **Deliberative Environments**

The women's issues hypothesis is most frequently discussed among scholars when examining gendered impacts on Congressional behavior, and frequently left out of the discussion are the actual acts that lead to policy-making. The influence of power dynamics on those acts plays a large role in understanding Congressional behavior. Most literature on gendered deliberation does not focus primarily on Congress, but rather on various settings involving power. There is limited research on how the deliberative process directly affects policy outcomes, but the scholarship that does exist suggests that men and women act differently in deliberative scenarios. In this section I explain the three main themes in the literature on

deliberation that relate to my research. Scholarship centers on volubility, power dynamics, and backlash.

Literature reveals that when a group has, on average, less authority in society, the individuals within that group speak less during deliberation, in whichever setting they may be. Therefore, they have less influence within the deliberative environment, and their authority in that environment becomes diminished (Karpowitz et al. 2012). In order to understand this deliberation hypothesis, scholars suggest that volubility, the total amount of time spent talking, must be considered (Karpowitz et al. 2012). The amount a person speaks affects that person's interactions with others (Brescoll 2011). Brescoll (2011) suggests that the more a person participates in discussion, the more power that individual has over the discussion. The more your voice is heard, the more your ideas impact the group understanding and decisions. In general, men have disproportionately greater power than women, and therefore they command more attention than women, taking up a larger space in the room with their voices. Additionally, men talk more than women, regardless of power position (Brescoll 2011).

Literature on the deliberation hypothesis begins by observing gendered norms. Men follow stereotypical norms during discourse, such as expressing individual agency, while women shy away from participation, especially when they are the minority in a group (Karpowitz et al. 2012). The significance of these norms is made clear in research with a specific focus on gendered behavior in deliberative environments. Karpowitz et al. (2012) suggest that if the number of women in a unanimous system increases to the point where women become the majority, men become overrepresented because the minority, if loud, has a larger voice in a unanimous system. That is, if everyone must agree in a unanimous system, then the few people who deviate have power over the whole situation. Since Congress is a majority-rule system, not

unanimous, the increasing number of women in Congress should not result in men's voices gaining power. The dynamics are exactly the opposite for a majority-rule system. As suggested by Karpowitz et al. (2012), in a majority-rule system, the minority gains more power as it increases in numbers. As the minority multiplies, expanding its voice, its power increases. Therefore an increase of women should be beneficial to their deliberative participation and influence.

Second, power dynamics are a major factor in deliberation. Brescoll (2011) proposes that power has a large effect on the volubility of men, but virtually no effect on that of women. Women are less likely to conform to aggressive masculine behavior, and therefore they are less involved in conversations in environments where individuals have power. As stated before, men have more power than women in the aggregate, and the way they use their power is in line with norms of masculinity. Men inherently have more power in Congress due to disproportionate numbers. Men also talk more than women outside of realms in which they hold positions of power. According to Brescoll, it is in their socialized nature to follow a more hierarchical power system, whereas women act more democratically. This means men command attention, while women leave space for other individuals to speak (Brescoll 2011). If women are giving up their space on the floor, men are taking it. Brescoll (2011) explains that men in positions of power aim to increase their volubility, while women's volubility remains the same. This creates an even greater power imbalance in Congress than we might expect elsewhere due to the combination of power used and deliberation done on a daily basis.

Finally, I want to address the issue of backlash outside of the context of the critical mass threshold. Scholars claim that backlash is a cause for less female participation in deliberation. Lyn Kathlene's (1994) study on a sampling of the 1989 Colorado state legislature committee



hearings provided evidence to support the idea that with more women in the room, women will be more silenced. Women became less voluble as more women enter the discussion because of increased backlash (Kathlene 1994). Scholarship shows that women have reason to fear backlash. The more they establish their power through discussion, the more resistant men become to their ideas. For example, in a study by Brescoll (2011), women who talked less than men in the same power position were seen as more competent than women who spoke more than the men. The less women speak, the less influence they have and the greater they are valued, which could affect their further interactions in the deliberative environment. If women are speaking more in Congress, does it affect their ability to pass legislation? Or does it have an effect on the way they speak in future legislative sessions? By studying the lengths and frequencies of speeches, I am better be able to understand these gaps in the research.

As stated, there are three factors involved in deliberation that lead me to believe that power dynamics affect how both women and men behave during the decision-making processes in Congress. By studying the behaviors of legislators as the number of women in Congress increases, we are better able to understand how gendered power dynamics shift.

### **Closing Gaps in Existing Scholarship**

It is clear that existing research provides us with answers on how women affect policy and on men's power domination in deliberative processes, but scholarship fails to show how the increasing number of Congresswomen affects deliberative processes and policy outcomes in Congress over time. I bring together the ideas from previous research through a comprehensive study on how the increasing number of women affects the behavior of individuals in Congress over a 25-year period.

By examining both the length and frequency of speeches on the congressional floor, I gain information on how highly powerful individuals in a majority-rule system vary in volubility. My research also reveals how women who hold elected positions act as a minority in a male-dominated system. Moreover, through exploration of the gender differences in the number of bills sponsored and passed over a certain period of time, I gain a broader idea of how effectiveness within the legislative process changes over time as the number of women in Congress increases. In observing both deliberative behavior and concrete policy-making behavior, I draw links between prior research on power dynamics in gender-imbalanced environments and the role of discourse in deliberative outcomes.

## **Conclusion**

The literature examining gendered impacts on legislative behavior produces findings in two major fields: women's interests and deliberative behavior. First, many scholars are purely focused on women's interests when discussing gender in Congress. The literature advances hypotheses on policy focus, legislative effectiveness, and the concept of critical mass. Second, Congress is a deliberative environment, and that environment must be understood in order to understand behavior within Congress. The literature on gendered deliberative environments raises hypotheses on volubility, power dynamics, and backlash.

Scholars claim that Congresswomen tend to discuss issues that relate to "women's issues" more than Congressmen do. This brings women's interests into the discussion that might have otherwise excluded them were no women in the room. It also forces men to examine women's issues. Additionally, women are more effective than men in passing various sorts of legislation, especially legislation that affects minority interests. All of the data collection to

support these claims was focused on limited time periods, not extended over time. Therefore, my research brings a new light to how the increasing number of women changes how members pass policy, and their effectiveness in doing so, over time.

The second conclusion made from my review of the literature is that the critical mass threshold plays a role in how women act in Congress. Once women pass this threshold, whatever it might be, there is the possibility of either institutional change or severe backlash. Both potentialities are supported through scholarly evidence, but nobody has yet studied directly how speech and deliberation changes in Congress as women approach that threshold. The percentage of women needed to create a critical mass is not yet clarified in the literature, and the effects that follow once the critical mass has been reached are still ambiguous. I believe the concept of critical mass is still significant for my hypotheses, and I hope to expand how we understand and interpret it.

The third major area of research that exists in the literature on gendered behavior in the legislator focuses on deliberation. Scholars appear to agree that volubility is important, especially when considering power dynamics in the deliberative environment. Volubility affects the interactions that individuals have with one another. If one group of individuals speaks more than another group, this affects the dominance in the room. Men tend to speak more than women, and if men feel more dominant and use that dominance to assert their ideas, then they have more power in the discussion. Men already hold a disproportionate amount of power in society, and therefore in deliberative environments women are the less powerful individuals. As the number of women in the room increases, their volubility increases, and therefore their power increases. Through collecting data on speech frequency and length, I am able to determine the ways in which volubility affects Congressional behavior over time. Finally under the concept of

deliberation, many scholars discuss the fear of backlash. If women speak more than men expect them to speak, then women have the right to fear backlash. As more women enter Congress I hypothesize that they will talk more, but the fear of backlash might stifle this. Therefore only through my research do we better understand the fear of backlash and its impacts.

The greatest gap in the literature is in understanding how Congressional effectiveness and deliberation change over time as women take up more space with their voices. Through my quantitative analysis I show how the number of women in the room affects how women sponsor policy and the ways they speak in relation to men. My research connects some of the missing links in gendered behavior in Congress.

## Chapter 3

### *Methods for Measuring Legislative Behavior*

#### **Introduction**

In this chapter I outline my methodology for data collection. My research focuses on the behavior of Congressmen and women, where I define behavior by two variables: sponsorship and volubility. In the following two sections, I outline operational definitions and data collection strategies for these two variables. In addition to my quantitative data collection, I performed a qualitative analysis through personal interviews. My interview strategies are also included in this chapter.

Additionally, in the following chapters I explain my strategy for analyzing my data, and within my assessment of behavior I use the term “confidence”. I define confidence as individuals’ reassurance in themselves. In evaluating behavior, my goal is to understand how the confidence of women increases or decreases as more women occupy space in the Congressional Chamber. I hypothesize that as the number of Congresswomen increases, each individual Congresswoman will be more confident. Therefore, understanding my definition of confidence is integral to accepting the methodology I use for analyzing behavior.

#### **Sponsorship**

My analysis of sponsorship focuses on the number of bills introduced in both houses of Congress, along with the final disposition of each bill. All quantitative data on sponsorship is collected from the Congressional Record, Congressional Proquest and the Biographical Directory of the United States Congress<sup>1</sup>. To examine sponsorship and cosponsorship over time,

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<sup>1</sup> “Congress.gov | Library of Congress.” Legislation. Accessed November 14, 2016. <https://www.congress.gov/>.

I employ a basic sampling scheme. Five Congressional Sessions are included in the data set: 102<sup>nd</sup>, 105<sup>th</sup>, 108<sup>th</sup>, 111<sup>th</sup>, 114<sup>th</sup>. These five sessions cover the years 1991-2016. There are 208 women that have served in the House and Senate since 1991, but 18 of these women did not serve in any of the five sessions listed. The universe of women does not include the 18 women that did not serve at these times and whose sponsorship I did not evaluate. Therefore, there are 190 women in my final sample.

Because I intend to compare the behavior of male legislators to that of women, I also include 190 men in the sample. In total there were 1,215 men that served in the House and Senate across the five sessions. After compiling a list of all men who served in the five sessions, I utilized Excel to derive a random sample of 190 men. I assigned every Congressman a unique number. I then used the function =RANDBETWEEN(1,1215) to generate a series of 190 random numbers between 1 and 1215, and those numbers were then matched to the numbers assigned to members of Congress.

Studying the behavior of all male legislators since 1991 is not feasible given the limits of time and resources. For this reason, I developed a strategy to sample from among all men who served in Congress during the five sessions under study. While doing so, I wanted to maintain as accurate of a sampling scheme as possible. Including all females is the best possible female universe I could have. A completely random sampling of men that matches the number of the women in the universe does leave out a large portion of the men, but approximately 16% of all men across the five sessions are included in the sample. This number is large enough that a

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“Congressional Publications - Basic Search.” Accessed November 14, 2016.  
<http://congressional.proquest.com/profiles/gis/search/basic/basicsearch>.

“Congressional Biographical Directory (CLERKWEB).” Accessed November 14, 2016.  
<http://bioguide.congress.gov/biosearch/biosearch.asp>.

small-N problem should not exist. In Chapter 4 I discuss my reasoning for my specific methods of sampling men.

I collected data on both *sponsored* and *cosponsored* bills. If a member of Congress sponsors a bill, he or she is the first individual listed on a bill to introduce the legislation. If a member cosponsors a bill, they are an individual who also has their name on the list to introduce the bill, but they are not the primary sponsor. Additionally, the bills that I used in my research exclude amendments, resolutions, joint resolutions, and concurrent resolutions. These are excluded mainly because it would have been infeasible time-wise to do an analysis of all types of legislation.

For each member in the sample, I collected the number of bills that they sponsored and cosponsored at the stages of introduction and passage. The result is that I collected four numbers for each member in each of the five Congressional Sessions. The numbers recorded were the number of bills sponsored and introduced, sponsored and became law, cosponsored and introduced, and cosponsored and became law. This excluded data on bills at any stage other than introduced or passed, such as under committee consideration, under floor consideration, failed or passed in chambers, sent to the president, and vetoed by the president. The bills passed into law went through various stages, but I did not collect data on the in-between stages. I was only concerned with sponsorship and cosponsorship that was introduced and that was fully passed into law.

The other stages are excluded for two reasons. First, time would not allow me to analyze sponsorship in each stage of the lawmaking process. Second, the clearest definition for effectiveness is based on whether or not the bill passed. Unfortunately, this excludes data showing at which stage of the legislative process females are most effective. On the other hand,

the clearest conception of the overall effectiveness of a legislator is the number of bills an individual introduces and the proportion of those that become law.

Moreover, the gender of legislators is not the only variable that affects their behavior in Congress. Therefore, In addition to the number of bills sponsored and co-sponsored during each of the five Congressional Sessions in the sample, I collected information on the personal characteristics of each member of Congress. I recorded their name, party, gender, the year they entered Congress, the body they currently or last occupied (House or Senate), the region from which they came, the occupation they held prior to getting involved in politics, and the political position they held before entering the US Congress (if any). Any of these factors could be more significant than gender, a possibility that I test in Chapter 4.

In Chapter 4, I discuss my analysis of the data that I collected. This includes an examination of my hypotheses and an assessment of the confidence gap between genders, based on the outcome of my hypotheses. My strategy for analyzing confidence is also included in the following chapter.

## **Volubility**

In Chapter 2, I noted that scholars have devoted considerable attention to the influence of gender on the volubility of legislators. That is, scholars have found that the more an individual speaks in a deliberative environment, the more power they have in that environment. Women tend to speak less in deliberative environments, particularly when they are in the minority. Again, volubility is most often defined as the total amount of time an individual speaks. In this section, I describe the procedures that I employed to measure the volubility of the legislators in my sample. The majority of data on volubility is collected from Congressional Proquest, the



Congressional Record, and the Biographical Directory of the United States Congress. Additionally, I sample legislation from four Congressional sessions: 102<sup>nd</sup>, 105<sup>th</sup>, 108<sup>th</sup>, and 111<sup>th</sup>. These sessions cover the years 1991-2010. I sampled fewer years than I did with sponsorship due to time limitations. For each Congressional Session, I sample five bills of significance. These bills are chosen from the book entitled *Landmark legislation 1774-2012: major U.S. acts and treaties*. The Library of Congress recommends this as the most accurate, up to date source of important legislation. I decided that I would sample from important legislation about which most legislators would have something to say, and I describe my reasoning in more detail in Chapter 5.

My measurement procedure was as follows. I split all policy areas from the Congressional record into five categories: foreign affairs, environment, family, economy, and government and laws. I then selected one significant bill from each of the policy areas at random from the book on landmark legislation. For example, I selected the “Freedom for Russia and Emerging Eurasian Democracies and Open Markets Support Act of 1992” for the foreign affairs bill from the 102<sup>nd</sup> session. I then selected 4 other bills, each in different policy categories, for my sample of the 102<sup>nd</sup> session.

The universe of Congressmen and women that may speak during floor debate on these bills is all Congressmen and women in each of the five sessions under study. This means that there are 190 women and 1215 men that could have been in the sample. The members whose volubility I observed are those who spoke on the sampled legislation. If a member did not speak on the significant pieces of legislation across various policy areas that I have sampled, then that member was not included in volubility analysis. The legislation is bills, excluding the same forms of legislation that were excluded in my sponsorship sampling. Moreover, I only sampled

bills that have been passed into law, or bills that were followed up by similar legislation that was passed into law.

I employed Congressional *Proquest* to examine floor speeches on each of the bills selected. In examining bills, I placed a particular focus on two variables: speech length and speech frequency. For each bill (20 in total), I measured the length and frequency of speeches for each member of Congress that spoke. Length was measured by word count. Frequency was measured by the number of times an individual speaks on a particular bill. While counting, I excluded any words that are used for parliamentary procedure, such as asking for more time, yielding time, or asking for a vote.

While I understand that a sampling of more pieces of legislation would lead to a more robust understanding of volubility in Congress, such an approach would clearly be infeasible in a project limited by time and resources. In fact, the few published studies on volubility in Congress are limited to a specific set of bills in a particular session. My focus on truly significant bills means that these are not necessarily niche bills, or pieces of legislation in which only a specific group might have interest, such as a bill on a specific state. Additionally, one might wonder why I sampled legislation instead of members of Congress. I could have picked a smaller sample of members and then counted their speeches in a specific session. I made this choice for several reasons. First, each bill is unique, and therefore discussion on that bill is in context to the bill. The length and frequency of speeches are most likely dependent on the context of the bill, not on how much a member of Congress is willing to talk in a day. Therefore, examining speeches in regard to a specific bill will control how the members speak on a specific issue. If all members are given the same opportunity to speak on the bill, I am examining how each one speaks in comparison to another on the same bill. If we look at all bills, some bills might apply

more to a specific state or specialized issue, rather than the general significant legislation that I will be examining. This should express a less skewed data set. Second, it would have taken far too much time and perhaps led to less accurate data had I involved even more sampling structures. I discuss my reasoning for sampling methods in more detail in Chapter 5.

Additionally, In Chapter 5 I discuss my analysis of hypotheses on volubility. I assess these hypotheses in relation to the confidence gap between genders. My strategy for analyzing confidence is included as well.

## **Interviews**

The majority of my study rests on quantitative analysis, but in order to fully understand Congressional behavior, qualitative analysis is also critical. In particular, hearing about the motivations and experiences of legislators themselves could add a great deal to my quantitative research. My interviews extended the analysis I performed on sponsorship and volubility. National level politicians are difficult to reach, and therefore I conducted interviews with state-level legislators and staff at both state and national level.

I carried out seven interviews: two with state legislators, three with national-level staff, and two with state level staff. The questions were broken into five categories: long-serving female legislator, long-serving male legislator, fairly new female legislator, fairly new male legislator, and Staff. I created the questions for the IRB process before performing the interviews, and therefore there are groups of questions that I did not end up using. Questions for each category were similar, as can be seen in the appendix, where the questions are listed. The interviews were guided by the questions, but in an effort to be more conversational than rigid, not all questions were asked.

These interviews were recorded and then transcribed, excluding quotes that subjects did not wish for me to include. Some subjects also wished to remain confidential. The purpose was to gain contextual evidence that could improve my analysis on behavior and confidence. While I could have performed more interviews and analyzed them more extensively, my main questions were centered on the evidence I was gathering from my quantitative data. Therefore the interviews were a nice qualitative addition to add support to my hypotheses, but they do not represent the major evidence on which my research rests.

### **Summary: Measurement and Data Collection**

My data collection is split into three key categories in order to assess behavior and confidence. The three types of data are: sponsorship, volubility, and qualitative interviews. In the chapters to follow, the quantitative analysis focuses on sponsorship, cosponsorship, effectiveness, and volubility as dependent variables. The most significant aspect of the sampling scheme and the focus of my analysis is change in behavior over *time*. Specifically, in the two chapters to follow, I specify hypotheses that predict that the legislative behavior of women changes as the number of women in congress increases. In addition, I hypothesize that the gap between men and women will decrease both in levels of sponsorship and volubility.

## **Chapter 4**

### **Understanding Gendered Sponsorship**

#### **Introduction**

In this chapter I discuss my analysis of gender's effect on legislative sponsorship and cosponsorship. I begin by describing my sample, which is a comprehensive set of data on Congress members' sponsorship and cosponsorship levels over the past 25 years. Included in the data set is an immense amount of demographic information on the members. After reviewing the sample and the rationale behind my sampling method, I delve into analysis of the data. I outline five hypotheses in this chapter, and the results of those hypotheses follow. Finally, I discuss factors aside from demographics that could play a role in the results. I conclude with a discussion of possible errors in my methodology and an overview of priorities for future research.

Moreover, in the previous chapter I discussed confidence. I hypothesized that as the number of Congresswomen increases over time, Congresswomen will become more confident or will have increased reassurance in themselves. In this chapter I define increased sponsorship and cosponsorship levels as indicators of increased confidence, and increased legislative effectiveness as an indicator of an increased positive impact from confidence.

#### **Legislative Sponsorship: Defining the Sample of Legislators**

##### *Explanation of Sampling Men*

In order to maximize leverage in the analysis of female sponsorship, I sampled all women who served in Congress across the five sessions, as explained in my methodology chapter. There are 190 women in my sample. However, to sample all male legislators across the five sessions would exceed the time and resources available. Therefore, I used the following methodology to

sample men. My sampling scheme was based on three rationales: time feasibility, true randomness, and analyzing individual members over time. Time was my greatest constraint on how I sampled. In order to sample, I first had to compile a list of all men within each of these 5 sessions. Then I assigned each a unique numerical code. After generating a set of random numbers in Excel, I matched those random numbers to the codes for male members. This in itself was a time consuming process, but to then multiply this process by five, in order to do it for each of the five sessions, would have been excessive with the time I had. What do I mean by doing it for each of the five sessions? If I wanted separate random samples for each of the five sessions, which would have provided me with equal numbers of men and women in each session, I would have had to complete the process of randomly generating numbers five separate times.

The second drawback in creating separate samples for each of the five sessions, and a main reason that I did not employ this method, is that members of Congress are not limited to one session. Therefore, had I sampled 3 male senators in the 102<sup>nd</sup> session to match the 3 female senators, I would then have had to track which of those male senators also served in the 105<sup>th</sup> session. If one of those men served in the 105<sup>th</sup> session, I would have to count them again in the 105<sup>th</sup>, and would lose randomness from my sample for that session. That one senator would have not been determined for that session as randomly as the other men in the sample. I chose randomness over equal numbers of men and women per session.

The last issue that arose when considering a sample that would allow for gender uniformity in each of the sessions was in analyzing the data over time. This relates to the idea that the sample must be completely random for all sessions. I sampled in a way in which I have complete randomness for every session. I also have the ability to compare individual members' behavior over time. Had I created five separate samples, one per session, I would have either

neglected randomness or analyzing individuals across the session. As described above, I would lose complete randomness if I sampled randomly per session and ensured that a member I sampled in the 102<sup>nd</sup> session was also sampled in later sessions that they served. Had I wanted true randomness, there would be a chance that an individual I sampled in the 102<sup>nd</sup> session would not be in my sample for the 105<sup>th</sup> session, despite possibly having served in the 105<sup>th</sup> session. Therefore, I created a completely random sample, not individual samples by session. That is, I do not have the proportion of men and women, or Senators and Representatives, in each session that would match the entire Congress. However, the members in my sample can be analyzed over time and they are truly random. Additionally, every member behaved the way they did in the context of the larger Congress. The individuals in my sample were all affected by a larger body, and I am analyzing the behavior of a select group from that body. The sample size should not affect the results, as long as there is no small-N problem.

How does all of this affect the overall quality of the sample? Women have never outnumbered men in the House or the Senate, and yet in my sample they outnumber men in the House in the 111<sup>th</sup> and 114<sup>th</sup> sessions, and in the Senate in all sessions excluding the 102<sup>nd</sup>. My random sample left me with unrealistic proportions in regards to gender. However, I do not believe that this affected my ability to test my hypotheses or the outcomes of analysis. The individuals in my sample were all still in Congress when making their legislative decisions and sponsoring bills. The actions they took that led to the behavior in my sample was all done within a Congress that has consistently had many more men than women. Therefore, the sample is just focusing on some of the men from that environment. If gender has an impact on that environment, then the men in my sample should show us just as much as the women in my sample will. If eight men instead of 80 men are sampled for the 114<sup>th</sup> session of Senate, that is

still 10% of the men in Senate at that time. This should reveal any trend in male behavior. While the numbers might not be perfect, and the sample might not show everything that a larger sample could if I had more time, these limitations should not affect the conclusions that I draw. Of course, we cannot know for sure because we have nothing to which I can compare my results. To my knowledge, no scholar has yet analyzed a more comprehensive data set than this, and one reason is the time-consuming burden associated with documenting trends over time. Even with a sample that displays some limitations, my research represents an important innovation – analysis of gendered behavior over time.

### *Summarizing the Characteristics of My Sample*

My sample contains every woman that served in each of the five sessions. It consists of only a fraction of the men that served, specifically 15.64% of all men in the Senate and House during these five sessions. The data contains information not only on sponsorship and cosponsorship, but also on certain demographic characteristics of members across the five sessions. A summary of these characteristics is shown in Table 4.1. My data set includes a comprehensive compilation of Congressional demographics over a 25-year period.

What can we learn from this data? Table 4.2 shows that from the 102<sup>nd</sup> to the 114<sup>th</sup> session, the number of women in the House has increased almost three-fold, and the number of women in the Senate has increased almost seven-fold. In my sample, the number of men in the House and Senate remains rather stagnant across the five sessions. Over the past 25 years, in both the House and Senate, men have made up at least 80% of Congress, decreasing over time as the number of women increased. Therefore, while the number of men in my sample remains



stagnant, and in multiple sessions there are fewer men than women, the individuals are all sampled from a Congressional environment in which men vastly outnumber women.

*Descriptive Characteristics of the Entire Sample (Table 4.1)*

Descriptive Characteristics		House		Senate	
		Men	Women	Men	Women
<b>Party</b>	<i>Republican</i>	94 (54%)	51 (32%)	9 (56%)	9 (30%)
	<i>Democrat</i>	80 (46%)	109 (68%)	7 (44%)	21 (70%)
<b>Occupation (Top 3)</b>	<i>Law</i>	57 (33%)	33 (21%)	1 (6%)	10 (33%)
	<i>Only Politics</i>	8 (5%)	17 (11%)	0 (0%)	8 (27%)
	<i>Education</i>	15 (9%)	37 (23%)	2 (13%)	2 (7%)
<b>Prior Office (Top 3)</b>	<i>State Representative</i>	31 (18%)	39 (24%)	1 (6%)	8 (27%)
	<i>State Senator</i>	41 (24%)	33 (21%)	4 (25%)	5 (17%)
	<i>No Prior Office</i>	31 (18%)	14 (9%)	3 (19%)	4 (13%)
<b>Region (Top 4)</b>	<i>South Atlantic</i>	37 (21%)	27 (17%)	3 (19%)	4 (13%)
	<i>Pacific</i>	21 (12%)	40 (25%)	1 (6%)	6 (20%)
	<i>East North Central</i>	26 (15%)	26 (16%)	0 (0%)	4 (13%)
	<i>West North Central</i>	9 (5%)	11 (7%)	3 (19%)	5 (17%)
<b>Race</b>	<i>White</i>	154 (89%)	118 (74%)	14 (88%)	28 (93.3%)
	<i>Black</i>	12 (7%)	30 (19%)	1 (6%)	1 (3.3%)
	<i>Hispanic/Latino</i>	7 (4%)	5 (3%)	0 (0%)	0 (0%)
	<i>Native Hawaiian/Pacific Islander</i>	0 (0%)	2 (1%)	1 (6%)	0 (0%)
	<i>Asian</i>	1 (<1%)	5 (3%)	0 (0%)	1 (3.3%)
<b>Seniority</b>	<i>(Average in Years)</i>	11.5	8.3	17	11.2

\*Source: Congressional Biographical Directory

### *House and Senate Breakdown*

In addition to the number of women and men in my sample, Table 4.2 shows the sample breakdown of members in the House and Senate. Members are categorized in House and Senate based upon either the last body in which they served before leaving Congress, or the body in which they currently serve. Individuals who once served in the House but now serve in the Senate are calculated in the percentages for Senate.

The sample consists of more members in the later sessions. The number of senators in the sample almost triples from the 102<sup>nd</sup> to the 114<sup>th</sup> session. The number of House representatives

in the sample increases by about 50% from the 102<sup>nd</sup> to the 114<sup>th</sup> session. Considering I am examining sponsorship over time, differences in the sample size per session should not have a great, if any, effect on the data. If I were to generalize about the entire sample, data from the 114<sup>th</sup> session would have more weight. Therefore, in describing demographics, data from the 114<sup>th</sup> session has more weight than data from the 102<sup>nd</sup> session.

***Breakdown of Women and Men in Each Session in the Sample (Table 4.2)***

Session	House		Senate	
	Men	Women	Men	Women
102	74 (73%)	28 (27%)	7 (70%)	3 (30%)
105	73 (56%)	57 (44%)	6 (40%)	9 (60%)
108	69 (53%)	62 (47%)	5 (26%)	14 (74%)
111	72 (48%)	78 (52%)	6 (26%)	17 (74%)
114	64 (43%)	86 (57%)	8 (29%)	20 (71%)

\* Tables 4.1 and 4.2 break the sample into House and Senate based upon the body in which individuals either last served (for those who have left Congress and/or died) or are currently serving. Therefore, some of the individuals who are accounted for in the Senate column in this chart would be in the breakdown for House in some sessions in the sample. Only the variable of body changes between sessions – party, occupation, prior office, region, and race remain the same throughout all sessions for all members in the sample.

### *Demographics Described*

As mentioned in the previous section, data from the 114<sup>th</sup> session does have more weight on these demographic generalizations, but the trends do not vary much from year to year.<sup>2</sup> There

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<sup>2</sup> *Race:* In all sessions, excluding the 105<sup>th</sup>, whites are above 90% of the Senate sample. The 105<sup>th</sup> session has the most African Americans of any Senate session. The percent of native Hawaiians remains low but decreases over time in the Senate sample. In the House sample, in every session, excluding the 114<sup>th</sup>, whites make up greater than 80% of the sample. The 114<sup>th</sup> is the session with the greatest number of native Hawaiians and Latinos.

*Region:* In the Senate, there is a rather even distribution over time of members from each region. This excludes New England, which had no representation in the 102<sup>nd</sup> session and 14% in the 114<sup>th</sup>. The Pacific region increased from 10% to 18% from the first to the last session in the Senate. In the House sample, there is a very steady distribution of regions between sessions.

*Occupation:* In the Senate, the greatest variation from the 102<sup>nd</sup> to the 114<sup>th</sup> sessions are in law and education, with law increasing from 0% to 29%, and education decreasing from 20% to 7%. Aside from these two occupations, the results do not vary greatly. In the House there are similar trends.

*Prior Office:* In the Senate, the greatest variation from the 102<sup>nd</sup> to the 114<sup>th</sup> session is in state representatives and campaign volunteers/workers. Representatives go from 0% to 25% and campaign volunteers go from 20% to 4%. In other prior offices the results do not vary greatly. In the House, the most significant variation is

are slightly more Republican than Democratic men in both the House and Senate in the sample, whereas there are more than twice as many female Democrats than female Republicans in both bodies. There are always more female Democrats than female Republicans in Congress. In three of the five sessions in my sample Republicans were in the majority, which is representative of the whole body.

For women and men in both the House and Senate, whites are in the overwhelming majority, which is representative of Congress across all sessions. Blacks are the next most common race in the sample, and then Native Hawaiians/Pacific Islanders, Asians, and Hispanics all occur at very low numbers in the sample, and not in every session or both bodies. This sample exhibits similar racial representation to the entire Congress, which is not representative of the entire US population.

The sample consists of members dispersed throughout all regions, but the most common regions are the South Atlantic, Pacific, East North Central, and West North Central. There are a great variety of occupations and prior offices among members, but I have identified the three most common of each in Table 4.2. In both the House and Senate, as well as across all sessions, these occupations and offices occur most often in the sample. The three most common occupations are positions in the fields of law, politics, and education. I recorded the last occupation members had before entering politics. If politics is their occupation, it means that they only ever worked in a political field. The three most common prior offices are state representative, state senator, and no prior office. Prior office is the last office a member was in before entering the US Congress. If they had no political experience at all, then they were entered as no prior office.

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in state representatives, which go from 16% in the 102<sup>nd</sup> session to 28% in the 114<sup>th</sup>. Among the other prior offices there is not much variation. (Data collected from the *Congressional Biographical Directory*)

Finally, also shown in Table 4.2, is seniority. The average seniority is calculated by finding the mean of the number of years that members have been in Congress. The average seniority for male senators is almost double that of women in the Senate. The average seniority of men in the House is greater than that of women in the Senate, with the average seniority of women in the House being far less. Therefore, women in the sample are less senior than men on average, which is representative of Congress as a whole. Less seniority leads to less power in Congress, which could have an impact on how effective members are at pushing their legislation to pass.

### **From Hypotheses to Unexpected Results: Sponsorship and Cosponsorship**

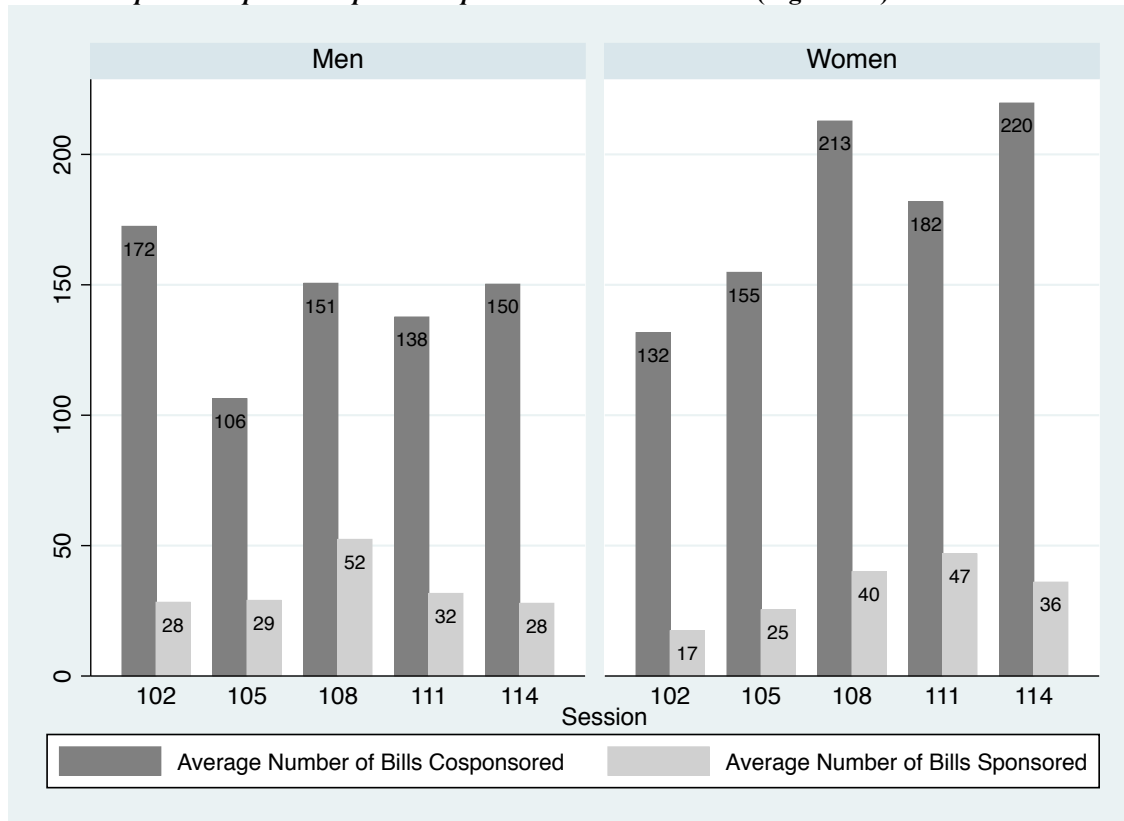
*Hypothesis 1: As the number of women in Congress increases, women will sponsor and cosponsor increasingly more legislation than men.*

Before examining this hypothesis, it is useful to recall its intellectual basis. I hypothesized that from session to session, the increase of women in Congress would impact sponsorship levels. Specifically, an increase of women would increase the gap between women's and men's sponsorship and cosponsorship levels. This could mean any of the following: women's levels increase and men's stay the same; women's levels increase and men's levels decrease; women's levels increase and men's increase, but less than women's; women's levels decrease, but men's decrease more; women's levels stay the same and men's decrease. If this hypothesis were to hold, it would show that a greater number of women in Congress have an impact on both women's and men's sponsorship levels.

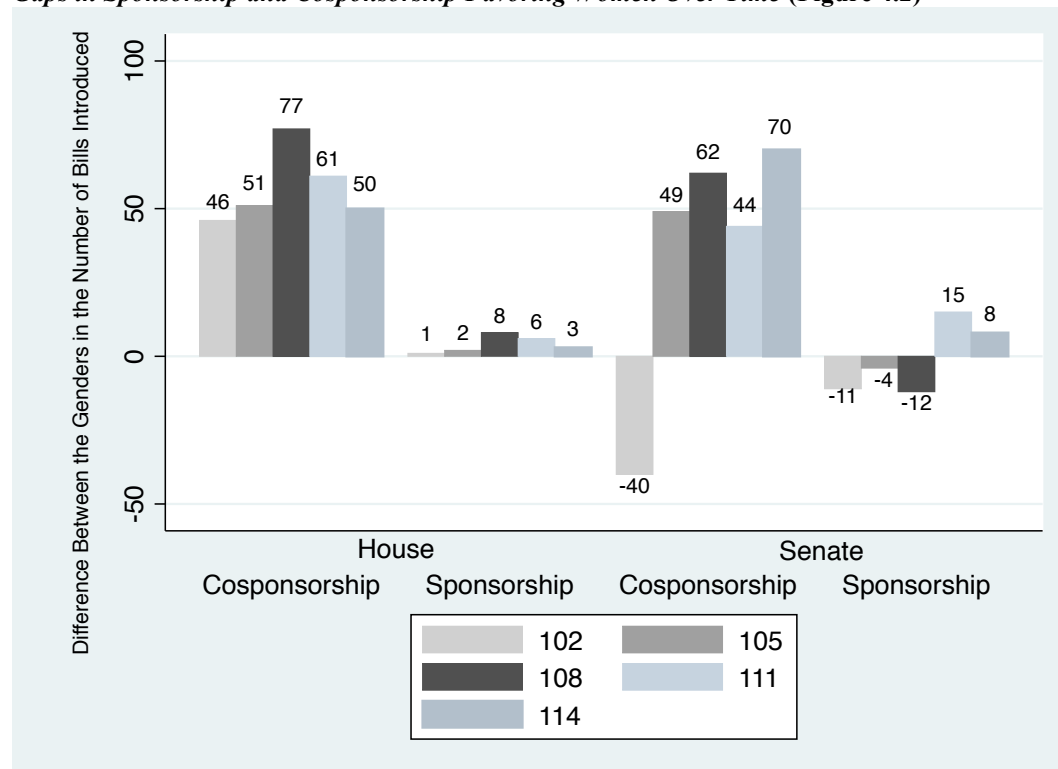
Unfortunately, none of these scenarios are fully supported by the data, meaning that my hypothesis only partially holds for part of the data. Figure 4.1 shows that for cosponsorship in the Senate, my hypothesis is somewhat supported. The gender difference in the average number of

bills cosponsored in the Senate is smallest in the 102<sup>nd</sup> session, wherein men cosponsored more bills than women on average. This happens to be the only session from my sample of the Senate in which men cosponsor more bills than women on average. Women cosponsor more than men in the 105<sup>th</sup>, 108<sup>th</sup>, 111<sup>th</sup>, and 114<sup>th</sup> sessions, with the largest gap between men and women in the 114<sup>th</sup> session. The gap between women and men's cosponsorship levels steadily increases over time, with an exception in the 111<sup>th</sup> session, as shown in Figure 4.2. Excluding this minor decrease in the 111<sup>th</sup> session, there is a trend showing an increase in the difference between men and women's cosponsorship as more women enter the Senate.

***Gendered Sponsorship and Cosponsorship in the Senate Over Time (Figure 4.1)***



**Gaps in Sponsorship and Cosponsorship Favoring Women Over Time (Figure 4.2)**

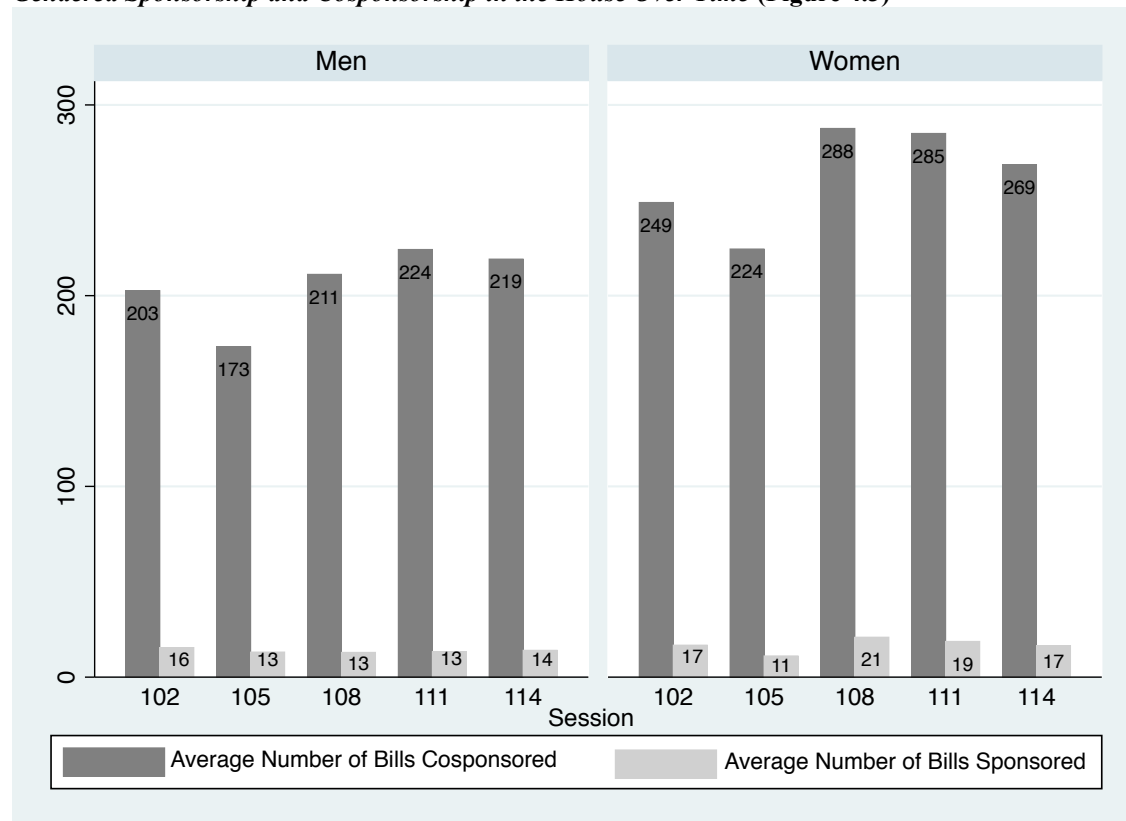


Note: Positive numbers indicate that the gap favored women and negative numbers show that the gap favored men. The more negative the number, the more male favorability. The gap is the difference between the average number of bills sponsored/cosponsored by women and those sponsored/cosponsored by men.

Sponsorship levels in the Senate also do not fully support my hypothesis. The gap between women and men's sponsorship levels decreases from the 102<sup>nd</sup> to the 108<sup>th</sup> session, which partially supports my hypothesis. Men sponsored more than women in these sessions, indicating that one of the scenarios of changes in sponsorship levels that I mention above is taking place. This trend continued into the 111<sup>th</sup> session, wherein women sponsor more on average than men, with a larger gap than ever occurred when men were sponsoring more. The gap size peaks in the 111<sup>th</sup> session, and while women still have a higher average sponsorship level than men in the 114<sup>th</sup> session, the gap between the genders decreased. This means that, again, my hypothesis was partially supported, but not fully. From session to session in the sample there appears to be inconsistency, but over the 25-year period, my hypothesis stands.

In the House, the cosponsorship gap between women and men is on an upward trend until the 111<sup>th</sup> session, when the gap begins to decrease, which can be seen in Figure 4.2. Women consistently cosponsor more than men throughout the five sessions, but the difference between women's and men's levels is greatest in the 108<sup>th</sup> Congress. If we look back to the data on the number of women in the House in Table 4.2, between the 108<sup>th</sup> and 111<sup>th</sup> sessions, women increase in number by five percentage points, and then again by five percentage points between the 111<sup>th</sup> and 114<sup>th</sup> sessions. This increase neither raises women's average cosponsorship levels, nor does it increase the gap between their levels and men's levels.

***Gendered Sponsorship and Cosponsorship in the House Over Time (Figure 4.3)***



Lastly, I examine sponsorship in the House in Figures 4.2 and 4.3. Again, there is a general trend of the gap between men and women's sponsorship levels shifting from favoring men to favoring women. The differences in the gap are most inconsistent in this relationship.

Women sponsor slightly more legislation than men on average in the 102<sup>nd</sup> session, but then in the 105<sup>th</sup> session men sponsor more on average than women. The gap then peaks to favor women in the 108<sup>th</sup> session. From the 108<sup>th</sup> to the 114<sup>th</sup> session this gap decreases, but women continue to have higher sponsorship levels on average than men. This data shows that over 25 years, the increase of women in Congress correlates with women's sponsorship levels in the House. When examining individual sessions, the increase is not consistent, and in recent years the gap has been decreasing.

*Hypothesis 2: As the number of in women Congress increases, the ratio of bills sponsored by women to cosponsored by women will increase.*

The ratio of sponsored to cosponsored is simply the average number of bills sponsored in a session compared to the average number of bills cosponsored in that same session. In my hypothesis I state that this ratio will change. The sponsorship level will get closer to the cosponsorship level. For example, if women sponsored 10 bills and cosponsored 20 in the 102<sup>nd</sup> session, then I expect the number to change in a trend where they might sponsor 15 and cosponsor 22 in the 105<sup>th</sup> session. Both sponsorship and cosponsorship increase under my hypothesis, but sponsorship increases at a greater rate. I hypothesize this because sponsorship is greater signifier of confidence. An individual proposing their own legislation, rather than signing on to another members', represents reassurance in one's own ideas.

Figure 4.1 reveals that in the Senate there is a steady increase of women's sponsorship levels over time, with the 114<sup>th</sup> being the only session in which the level decreases. There is also a steady increase of cosponsorship levels, excluding the 111<sup>th</sup> session, when the level drops below that of the 108<sup>th</sup> session, but still remains higher than the 105<sup>th</sup> session. Sponsorship levels



are consistently far lower than cosponsorship levels. Additionally, as both sponsorship and cosponsorship levels for women increase, cosponsorship levels have far greater increases from year to year. There is an increase of 8 bills sponsored on average from the 102<sup>nd</sup> to the 105<sup>th</sup> session, whereas there is an increase of 23 bills cosponsored on average in that same time period. From the 105<sup>th</sup> to the 108<sup>th</sup> session, sponsorship and cosponsorship increase at about twice the rate they did during their first increase, which means cosponsorship is at an increasingly higher level in the ratio. Then, from the 108<sup>th</sup> to the 111<sup>th</sup> session, the cosponsorship level decreases, but the sponsorship level increases. In the last time interval, the cosponsorship level increases as the sponsorship level decreases. There is no clear trend of the sponsorship-cosponsorship ratio changing in favor of sponsorship. There are inconsistent leaps of sponsorship, but the increase of women in Senate does not appear to alter the relationship between sponsorship and cosponsorship levels in any consistent way.

My hypothesis is also not supported by the data from the House. The only increase in women's average sponsorship and cosponsorship levels in the House occurs between the 105<sup>th</sup> and 108<sup>th</sup> sessions. Additionally, cosponsorship levels are higher in the 114<sup>th</sup> than the 102<sup>nd</sup> session for women. Sponsorship levels are the same in the two sessions. Neither cosponsorship levels, nor sponsorship levels vary much between the sessions, but cosponsorship levels vary more, meaning the ratio is only altered by slight increases and dips in cosponsorship. This inconsistency in the average House levels of cosponsorship and sponsorship for women does not support my hypothesis.

*Hypothesis 3: As the number of women in Congress increases, the ratio of bills cosponsored by men to sponsored by men will increase.*

My third hypothesis is that men will follow a trend opposite to that of what I hypothesized for women, meaning their rate of cosponsorship will increase more than their rate of sponsorship. Considering women do not follow the trend that I hypothesized, men would not be acting in an opposite manner, but rather following a trend of their own. For example, if men sponsored 10 bills and cosponsored 20 in the 102<sup>nd</sup> session, then I expect the numbers to change in a trend where they might sponsor 12 and cosponsor 25 in the 105<sup>th</sup> session. Both sponsorship and cosponsorship increase under my hypothesis, but cosponsorship increases at a faster rate. I hypothesize this because I believed that women would be sponsoring more legislation. As women sponsored more legislation, there would be a greater variety of bills for men to cosponsor. This is based on the assumption that scholars' findings on gender and policy area are true, and women would bring a new focus to legislation. If men are concentrating on this new legislation, then I would think they are less focused on sponsoring many bills of their own. If women had increased their sponsorship levels as I hypothesized, then they would need more cosponsors, and men would therefore have the opportunity for more cosponsorship.

Men's cosponsorship levels vary greatly from session to session in the Senate, which can be seen in Figure 4.1. They continuously switch between increasing and decreasing. Sponsorship levels increase until the 108<sup>th</sup> session, when they peak, and then decrease until the 114<sup>th</sup> session. The inconsistency of the cosponsorship levels and the peaking of the sponsorship levels create inconsistency in ratio changes between sponsorship and cosponsorship levels. Between the 105<sup>th</sup> to the 111<sup>th</sup> sessions, both cosponsorship and sponsorship increase and then decrease. Sponsorship increases less than cosponsorship, but there is no other similar increase to compare

it to. The changes in the ratio are so inconsistent that no trend can be found. Therefore, there is no general trend in the Senate for the ratio of cosponsored to sponsored bills by men as the number of women increases.

In the House, men's average cosponsorship and sponsorship levels are less inconsistent than in the Senate, as seen in Figure 4.3. The average sponsorship level for men decreases from the 102<sup>nd</sup> to the 105<sup>th</sup> session, but then remains constant until a slight increase in the 114<sup>th</sup> session. Cosponsorship levels also decrease from the 102<sup>nd</sup> to the 105<sup>th</sup> session, but then marginally increase until the 111<sup>th</sup> session, and in the 114<sup>th</sup> session decrease very slightly. Here, we see more consistent increases in cosponsorship. The gap between bills sponsored and cosponsored on average increases and then decreases over time, but it is the changes in cosponsorship that affect these ups and downs. This means that my hypothesis partially holds. Cosponsorship levels increase at a greater rate than sponsorship levels, when they increase, though levels are not always increasing. However, since my hypotheses about women were not supported, the results on men do not meaningfully expand our understanding of behavioral changes in Congress over time.

*Hypothesis 4: As the number of in women Congress increases, women will be increasingly more effective in sponsorship and cosponsorship than men.*

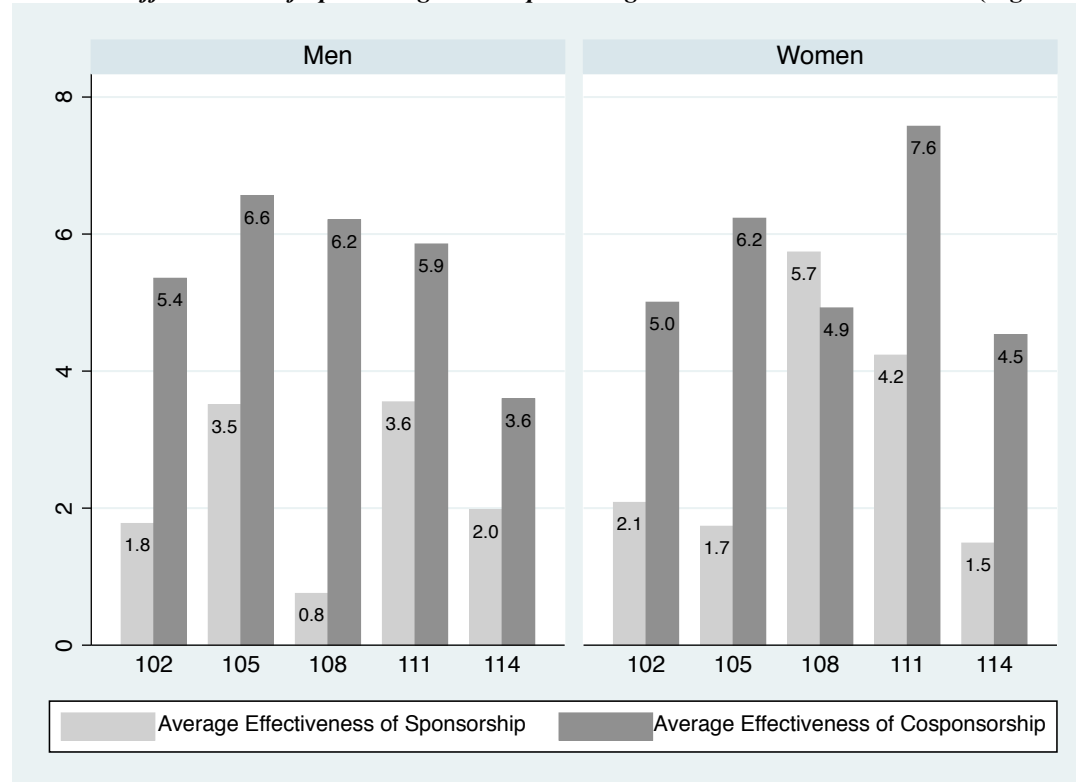
- a) Over time, a larger percentage of the bills women sponsor and cosponsor will be passed into law than men's bills will be. (This assumes that men are more effective in the 102<sup>nd</sup> session.)*
- b) The gap between the success rate of women and men's sponsorship and cosponsorship will increase to favor women over time.*

I pursue the first part of this question by examining Figure 4.4 for the Senate. In the Senate, women are more effective when cosponsoring bills than men in the 111<sup>th</sup> and 114<sup>th</sup> sessions. Up until the switch where women become more effective, there is no decreasing or increasing trend in effectiveness levels. Additionally, both men and women are less effective in the 114<sup>th</sup> session than the 102<sup>nd</sup>, but this could be due to other factors, such as leadership and party control, which I discuss later in this chapter. Therefore, as time increases, and as more women enter the Senate, women become more effective than men in cosponsorship.

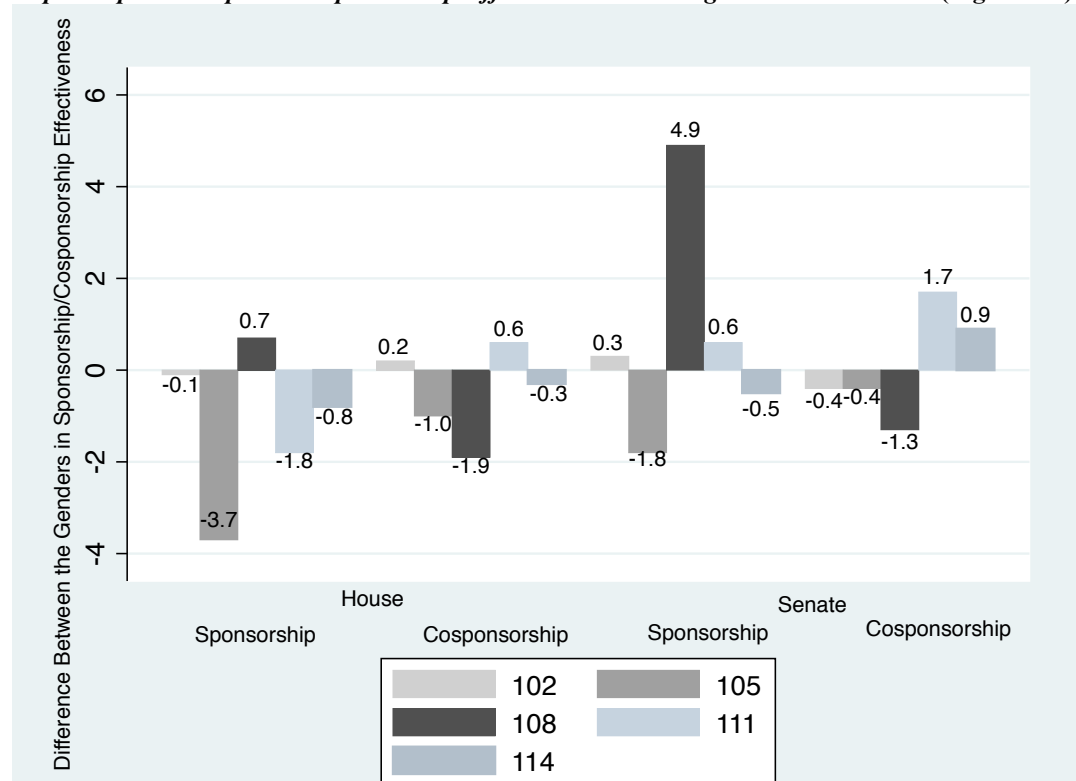
Women are more effective than men in the Senate at sponsorship during three of the five sessions. Only in the 105<sup>th</sup> and 114<sup>th</sup> sessions are they less effective. My assumption about men's effectiveness in the 102<sup>nd</sup> session was wrong. Women are more effective than men in the 102<sup>nd</sup> session, but then their effectiveness drops below men's in the 105<sup>th</sup> session. It increases in the next session to reach a level above men's, and then begins a decreasing trend until the 114<sup>th</sup> session, when women's effectiveness level again drops below men's. My analysis shows that women do not become more effective than men at sponsorship as more women enter Congress.

I examine the second part of my hypothesis using Figure 4.5. In the first two sessions in the sample, the gap between women and men's effectiveness in Senate cosponsorship does not change. It then increases in the 108<sup>th</sup> session to favor men more before switching to favor women in the 111<sup>th</sup> session. The gap then decreases, but still favors women for cosponsorship in the 114<sup>th</sup> session. The greatest gap between women and men's effectiveness in sponsorship in the Senate is during the 108<sup>th</sup> Congress. There is not a consistent increasing trend in the gap between men and women for sponsorship effectiveness. Men do end up favored in the effectiveness gap in the 114<sup>th</sup> session.

**Gendered Effectiveness of Sponsoring and Cosponsoring Bills in the Senate Over Time (Figure 4.4)**



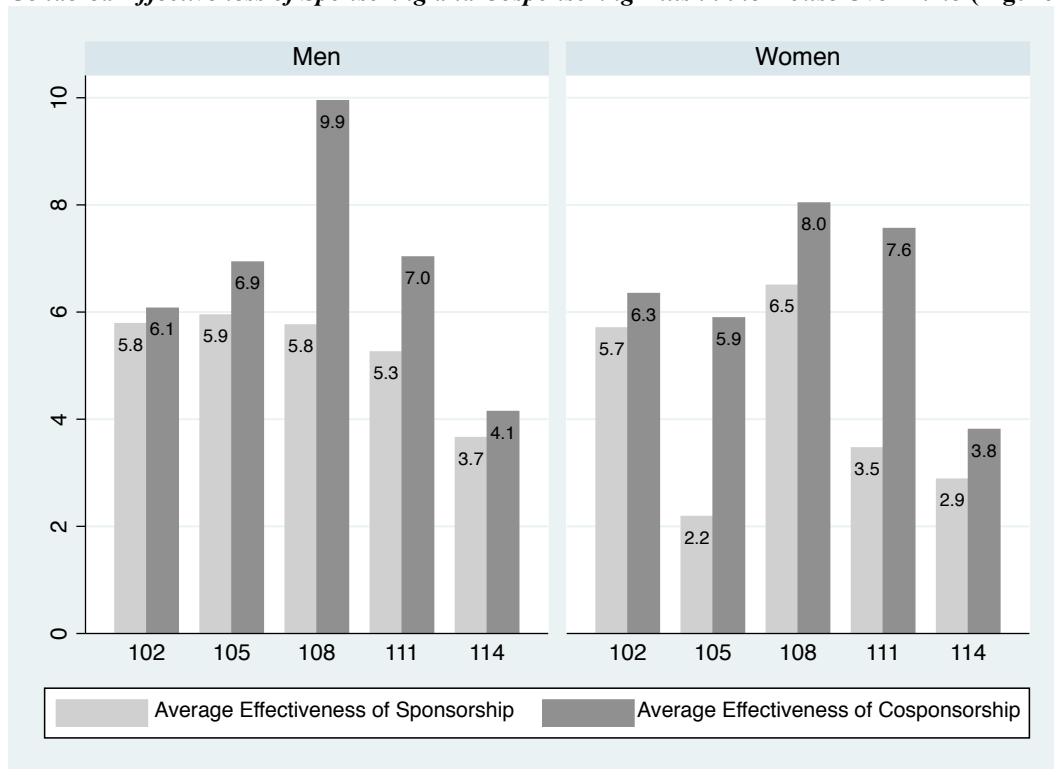
**Gaps in Sponsorship and Cosponsorship Effectiveness Favoring Women Over Time (Figure 4.5)**



Note: Positive numbers indicate that the gap favored women and negative numbers show that the gap favored men. The more negative the number, the more male favorability. The gap is the difference between the average sponsorship/cosponsorship effectiveness of women and that of men.

This contradicts my hypothesis, showing that women not only are not consistently more effective than men, but over time they have not become increasingly more effective at sponsorship in the Senate. Women’s cosponsorship effectiveness levels do support my hypothesis, in that women become increasingly more effective than men if we compare the 102<sup>nd</sup> and 114<sup>th</sup> sessions. The gap between men and women’s effectiveness in cosponsorship does increase to favor women over time. However, it does not increase between the two years in which women are favored in the gap.

***Gendered Effectiveness of Sponsoring and Cosponsoring Bills in the House Over Time (Figure 4.6)***



Men and women’s effectiveness levels in the House are shown in Figure 4.6. Both genders’ cosponsorship effectiveness levels peak in the 108<sup>th</sup> session and are at their lowest in the 114<sup>th</sup> session. Therefore, neither women nor men’s effectiveness in cosponsorship increases over time. Additionally, women are more effective in cosponsorship than men in the 102<sup>nd</sup>

session and less effective in the 114<sup>th</sup> session. Men are also more effective than women at sponsorship over time. In all but one session, the 108<sup>th</sup>, men's sponsorship levels are favored. Both women and men are less effective over time, but women's levels decrease more than men's. Over time, women become decreasingly more effective than men in cosponsorship and sponsorship in the House, which contradicts my hypothesis.

The gap between women and men's effectiveness in cosponsorship in the House increases to favor men more over time, though the trend is inconsistent. That is, over time the gap increases to favor men, then decreases and favors women, and then increases and again favors men. The gap does favor women in the 111<sup>th</sup> session. However, the gap not only favors men for cosponsorship in the 114<sup>th</sup> session, but it is also larger than the gap in the 102<sup>nd</sup> session, in which it favored women. The gap also increases to favor men in sponsorship effectiveness. The greatest gap between men and women, when men are most effective, is in the 105<sup>th</sup> Congress. This gap then switches to favor women for one session in the sample, but then flips back to favor men for the rest of the sample. The gap between men and women's effectiveness of sponsorship does decrease from the 111<sup>th</sup> to the 114<sup>th</sup> session. This inconsistency of the gap, and lack of women's effectiveness, shows that my hypothesis is not supported by the data on House sponsorship or cosponsorship. An increase in women in the House over time does not necessarily mean that women are more effective in sponsorship or cosponsorship.

My fourth hypothesis stands partially, insofar as women in the Senate are now more effective than men in cosponsorship compared to the beginning of the 25-year time period.

*Hypothesis 5: a) Gender will have a more significant impact than any other personal characteristic on changes in individual members' levels of sponsorship and cosponsorship.*

*b) The increase in the number of women legislators over time will have a significant impact on both men's and women's (co)sponsorship levels and effectiveness.*

I pursue the first part of this question by estimating the effect of an individual member's gender on sponsorship, cosponsorship, and effectiveness levels, while controlling for important personal characteristics that may also affect these variables. I estimate OLS regression equations for each of the dependent variables (sponsorship, cosponsorship, and effectiveness) and 10 independent variables. The equations include the following independent variables:

- Gender: woman=1, man=0
- Non-whiteness: non-white=1, white=0
- Party: Democrat=1, Republican=0
- Legislative experience: experience=1, no experience=0
- Governmental experience: experience=1, no experience=0
- Career in law: prior occupation law=1, prior occupation not law=0
- Life-long career in politics: life-long in politics=1, not life-long in politics=0
- Career in education: prior occupation education=1, prior occupation not education=0
- Region: census south=1, not census south=0
- Seniority: years of service at the time of the speech, entered as numerical data

Legislative experience includes all prior offices that involve legislating. These are: city/state council, state representative, state senator, mayor, governor, lieutenant governor, Congressional staff, and legislative consultant. Government experience includes all government positions that do not involve legislating. These are: attorney general, school board, campaign volunteer/worker, government appointed positions (might legislate, but not a designated legislator), county/state boards, community organizers/lobbyists, district attorney, justice of the



peace, and party chairman. Neither legislative, nor governmental experience, include individuals without any political experience. Careers in law and education were the most common careers among the Congress members. Life-long career in politics showed itself frequently as well, and I define this as individuals who only ever worked in politics.

The results are shown in Table 4.3 for the House. In the House, gender is a statistically significant predictor for sponsorship and cosponsorship levels, but not for effectiveness.<sup>3</sup> Specifically, the coefficients for gender in the equations for sponsorship and cosponsorship show that women sponsor and cosponsor significantly more bills on average than men. However, gender is not the most significant predictor. Legislative experience and seniority cause more significant changes in sponsorship. Individuals with legislative experience sponsor fewer bills on average than those without it. More senior members sponsor more bills on average. Region influences sponsorship less than gender does, but individuals from the census south do sponsor significantly fewer bills on average than members not from the south. Gender has a highly significant impact on cosponsorship levels in the House. However, party is a more significant predictor than gender. Democrats cosponsor more bills on average than Republicans. Additionally, non-white members of the House cosponsor significantly more bills than whites, and members who have spent their lives involved in politics cosponsor significantly fewer bills than those who had other careers before entering politics. Gender does not have a significant impact on the effectiveness of sponsorship or cosponsorship in the House. Seniority has significant influence on the effectiveness of both sponsorship and cosponsorship. The more senior members are, the more effective they are in getting their bills passed. Non-whites are significantly less effective at cosponsorship in the House.

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<sup>3</sup> When I use the term “significance,” or any form of this word, I mean statistically significant.

*House (Co)Sponsorship and Effectiveness, (Table 4.3)*

	Bills Introduced - Sponsored	Bills Introduced - Cosponsored	Effectiveness of Sponsorship	Effectiveness of Cosponsorship
Gender	3.645 (2.19)*	42.214 (4.86)**	-1.354 (1.76)	-0.111 (0.32)
Non-Whiteness	3.956 (0.94)	42.795 (3.42)**	0.449 (0.48)	-1.321 (3.61)**
Party	-0.245 (0.18)	57.727 (7.08)**	-0.973 (1.16)	-0.476 (0.89)
Legislative Experience	-4.725 (2.47)*	-6.169 (0.50)	0.826 (0.74)	0.621 (1.18)
Government Experience, Not Legislative	0.809 (0.25)	5.365 (0.38)	0.784 (0.68)	0.209 (0.44)
Career in Law	3.275 (1.05)	-1.039 (0.11)	-1.397 (1.68)	-0.272 (0.60)
Life Long Political Career	-0.926 (0.32)	-36.914 (2.22)*	0.308 (0.25)	0.886 (0.82)
Career in Education	0.997 (0.62)	1.094 (0.10)	1.097 (0.97)	-0.237 (0.50)
From the Census South	-3.178 (1.97)*	-12.386 (1.41)	0.460 (0.54)	-0.045 (0.11)
Seniority	0.363 (4.79)**	0.201 (0.37)	0.084 (1.96)*	0.110 (2.21)*
Constant	12.168 (6.58)**	179.889 (12.73)**	4.248 (3.65)**	5.644 (10.63)**
$R^2$	0.05	0.19	0.02	0.05
$N$	663	663	657	663

\*  $p < 0.05$ ; \*\*  $p < 0.01$ 

Ordinary least squares regression with t-ratios in parentheses

From this analysis, we can conclude that gender does affect sponsorship and cosponsorship, but does not affect effectiveness. However, the regression also shows that other predictors might influence gender's impact on the dependent variables. Among individuals in the sample with legislative experience, neither gender is dominant. Therefore, it makes sense that we do not see the same negative significance in gender as we do in legislative experience for sponsorship. However, women have less seniority than men. The strong significance of seniority

in sponsorship might explain why gender has weaker significance. If there is positive significance for Democratic cosponsorship, then the women who are Democrats should cosponsor significantly more than the women who are Republicans. The majority of women in Congress are Democrats, which could explain the positive significance of gender in cosponsorship. Seniority has a significant impact on effectiveness, and is the only significant predictor aside from race. Considering women are newer to Congress than men, their seniority will increase over time. This means that women's effectiveness should increase as well. The negative significance of race might explain why gender is not a significant predictor. More women than men are racial minorities, and therefore if these minorities are less effective, then more women inherently are as well.

The results are shown in Table 4.4 for the Senate. Gender is only a significant predictor for cosponsorship levels. Government experience has a significant impact on sponsorship levels, but southern-ness is an even stronger predictor for sponsorship and cosponsorship. Members with government experience sponsor fewer bills than those without any experience or those with legislative experience. Southern members sponsor and cosponsor fewer bills on average than those not from the south. There are no significant predictors for effectiveness in the regression.

It is evident that gender does not have a significant impact on sponsorship or effectiveness in the Senate, though it does affect cosponsorship. Southern-ness has a negative effect on sponsorship and cosponsorship, which might contribute to the reason why gender's impact is not as significant as I hypothesized. In the sample, more women than men come from the south, but among women there are more non-southerners than southerners. Therefore, southern-ness has a greater impact on women's sponsorship and

cosponsorship levels than men's, but it is not dominant in influencing women's affect on the dependent variables.

*Senate (Co)Sponsorship and Effectiveness, (Table 4.4)*

	Bills Introduced - Sponsored	Bills Introduced - Cosponsored	Effectiveness of Sponsorship	Effectiveness of Cosponsorship
Gender	10.330 (1.94)	39.905 (2.54)*	2.315 (1.31)	0.953 (1.26)
Non-Whiteness	18.434 (1.13)	1.562 (0.05)	1.666 (0.97)	-0.658 (0.62)
Party	0.533 (0.10)	39.328 (1.89)	-1.717 (1.35)	-0.570 (0.79)
Legislative Experience	-10.913 (1.96)	-26.427 (1.22)	0.120 (0.13)	-0.653 (0.93)
Government Experience, Not Legislative	-16.918 (2.05)*	-51.140 (1.54)	2.242 (0.78)	-0.275 (0.23)
Career in Law	-5.605 (0.91)	-2.275 (0.11)	-1.244 (0.56)	0.740 (0.75)
Life Long Political Career	-1.172 (0.18)	-1.299 (0.07)	-2.217 (1.11)	-0.964 (1.37)
Career in Education	8.219 (0.64)	-8.202 (0.26)	-1.020 (0.44)	1.068 (0.82)
From the Census South	-18.967 (3.53)**	-54.486 (3.58)**	2.316 (1.41)	-0.525 (0.88)
Seniority	0.223 (0.99)	-0.741 (1.13)	0.010 (0.16)	0.040 (1.23)
Constant	40.970 (5.21)**	179.381 (6.11)**	1.795 (1.15)	5.430 (4.92)**
$R^2$	0.19	0.27	0.11	0.08
$N$	95	95	94	95

\*  $p < 0.05$ ; \*\*  $p < 0.01$

Ordinary least squares regression with t-ratios in parentheses

I pursue the second part of this question, which explores whether the increasing number of women in the House and Senate has an impact on the dependent variables, while controlling for important personal characteristics that may also affect these variables. I estimate OLS

regression equations for each of the dependent variables (sponsorship, cosponsorship, and effectiveness) and the same 10 independent variables above, excluding gender. In place of gender is a variable for the number of women in Congress. For each session in each body, I calculated the number of women (as shown in Table 4.2). These numbers were entered into the data set as numerical data. Additionally, I sorted the regression by gender in order to compare how the number of women affects men and women's behavior separately, if at all.

The results are shown in Table 4.5 for the Senate. Among both men and women, the number of women in the Senate has no influence on sponsorship, cosponsorship, or effectiveness. Seniority has a significant negative impact on cosponsorship levels among men. The more senior a congressman is, the fewer bills he cosponsors. Among women, legislative and government experience, as well as a career in education, have a significant negative impact on sponsorship. As experience increases, sponsorship decreases. Individuals with careers in education sponsor less than individuals who did not leave a career in education to enter politics. The only possible explanation I have for the decrease of sponsorship with increases in seniority and experience is that individuals who know the system work less to get their name on every bill than they do to actually pass productive legislation. The only problem with this theory is that these individuals are not significantly more effective at passing legislation than members without experience. Education is also a significant negative predictor that I have difficulty explaining. The most important result of this regression is that the increase of women in the Senate has no significant impact on men or women's legislative behavior in regards to sponsorship and cosponsorship.

The results are shown in Table 4.6 for the House. The number of women in the House has no effect among men or women on sponsorship or cosponsorship, and no impact among men

on effectiveness, but among women it is a significant predictor of effectiveness. Specifically, the coefficient for the number of women in the House for the equation on women's effectiveness in cosponsorship reveals that women are less effective in passing bills they cosponsor as the number of women in Congress increases. Men with legislative experience, a career in law, or a life-long career in politics sponsor fewer bills than individuals without experience or careers in these fields. Greater seniority significantly increases sponsorship levels. Non-white members and democrats cosponsor more bills on average than whites and Republicans. Members with legislative experience and southerners sponsor fewer bills than those without experience and those not from the south. Race, legislative experience, and seniority also significantly impact effectiveness of cosponsorship among men. While non-white members cosponsor more bills than whites, they are less effective in passing cosponsored legislation. The opposite goes for legislative experience. Individuals with legislative experience cosponsor fewer bills, but they are more effective in passing those bills. Seniority is a positive predictor for effectiveness of cosponsorship.

While my analysis shows that the number of women in the House has no impact on men's Congressional behavior in terms of sponsorship or cosponsorship, it does provide us with interesting information. Male racial minorities cosponsor many bills, but a smaller proportion of those bills pass than the proportion among whites. A similar pattern occurs among Democrats with cosponsorship, but the effectiveness levels are not significant. The assumption I made about members with legislative experience gains support here. These members might sponsor less in order to gain more support for the bills they do sponsor and cosponsor.

The number of women in the House influences the effectiveness of cosponsorship among women. As the number of women in the House increases, their effectiveness of cosponsorship

significantly decreases. This completely contradicts my hypothesis. Though, race, party, and legislative experience are also negative predictors of cosponsorship effectiveness. There are larger proportions of non-whites among women than men, and there are larger proportions of women among Democrats than Republicans. If race and party have a negative impact on cosponsorship effectiveness, then Democratic and minority women also have a negative influence. Therefore more women means that women become a more significant negative predictor.

Additionally, as seniority increases among women, sponsorship increases as well, which I predicted based on the regression in Table 4.6. Moreover, Democrats cosponsor more legislation than Republicans, but as previously mentioned, a smaller proportion of these bills get passed into law. It is clear from my analysis that the number of women in Congress does not have a significant impact on sponsorship, cosponsorship or effectiveness, and the minor impact it does have is negative.

*How the Number of Women in the Senate Affects (Co)Sponsorship and Effectiveness (Table 4.5)*

	Men				Women			
	Bills Introduced - Sponsored	Bills Introduced - Cosponsored	Effectiveness of Sponsorship	Effectiveness of Cosponsorship	Bills Introduced - Sponsored	Bills Introduced - Cosponsored	Effectiveness of Sponsorship	Effectiveness of Cosponsorship
Number of Women in the Senate	0.737 (1.15)	1.132 (0.46)	0.059 (0.55)	0.009 (0.12)	0.434 (0.57)	2.519 (0.95)	0.222 (0.80)	-0.069 (0.70)
Non- Whiteness	29.849 (1.23)	-3.770 (0.08)	2.101 (0.96)	-0.700 (0.44)	-11.214 (1.46)	12.316 (0.40)	0.801 (0.30)	-1.941 (1.81)
Party	14.049 (1.34)	70.262 (1.88)	-1.321 (0.79)	-0.596 (0.41)	-3.507 (0.58)	38.905 (1.60)	-2.694 (1.43)	-1.295 (1.47)
Legislative Experience	-1.158 (0.12)	-8.603 (0.19)	1.697 (1.31)	0.299 (0.22)	-14.840 (2.52)*	-28.327 (1.19)	0.524 (0.29)	-0.464 (0.52)
Government Experience, Not Legislative	9.287 (0.34)	-43.832 (1.01)	-0.036 (0.03)	-2.146 (1.77)	-28.785 (3.36)**	-28.777 (0.67)	2.676 (0.66)	0.036 (0.02)
Career in law	-15.787 (0.55)	-13.829 (0.35)	0.493 (0.13)	0.854 (0.28)	-1.736 (0.15)	15.421 (0.48)	-2.640 (0.67)	1.338 (0.99)
Life long Political Career	--	--	--	--	-1.573 (0.09)	19.567 (0.59)	-5.268 (1.23)	0.029 (0.02)
Career in Education	-15.198 (0.48)	-30.172 (0.75)	2.247 (1.02)	3.802 (1.82)	-20.333 (2.93)**	-42.582 (2.29)*	3.601 (1.46)	0.037 (0.05)
From the Census South	-19.292 (1.58)	-29.655 (0.83)	-2.139 (1.22)	-2.662 (1.83)	0.504 (0.95)	1.854 (1.72)	-0.129 (0.68)	0.001 (0.01)
Seniority	-0.144 (0.35)	-2.877 (2.90)**	0.076 (0.87)	0.088 (2.11)*	-2.389 (0.31)	4.146 (0.20)	-3.042 (1.20)	-1.014 (1.28)
Constant	19.454 (1.54)	170.145 (3.36)**	0.123 (0.05)	4.798 (2.94)**	50.480 (4.95)**	137.682 (3.26)**	2.974 (0.91)	8.025 (4.56)**
$R^2$	0.33	0.40	0.18	0.31	0.29	0.26	0.21	0.17
$N$	32	32	32	32	63	63	62	63

\*  $p < 0.05$ ; \*\*  $p < 0.01$

Ordinary least squares regression with t-ratios in parentheses



*How the Number of Women in the House Affects (Co)Sponsorship and Effectiveness (Table 4.6)*

	Men				Women			
	Bills Introduced - Sponsored	Bills Introduced - Cosponsored	Effectiveness of Sponsorship	Effectiveness of Cosponsorship	Bills Introduced - Sponsored	Bills Introduced - Cosponsored	Effectiveness of Sponsorship	Effectiveness of Cosponsorship
Number of Women in the House	-0.016 (0.49)	0.531 (1.92)	-0.029 (1.19)	-0.016 (1.19)	-0.047 (0.57)	0.090 (0.24)	-0.038 (0.92)	-0.030 (2.60)**
Non- Whiteness	-1.880 (1.03)	55.452 (2.98)**	-0.518 (0.33)	-1.372 (2.46)*	7.269 (1.01)	19.919 (1.16)	1.769 (1.53)	-0.934 (2.12)*
Party	1.321 (0.95)	33.816 (3.20)**	-0.172 (0.15)	-0.297 (0.37)	-2.212 (0.77)	98.612 (8.15)**	-2.408 (1.81)	-1.020 (2.13)*
Legislative Experience	-5.375 (2.50)*	-32.857 (2.11)*	0.828 (0.56)	1.868 (2.35)*	-4.074 (1.22)	33.599 (1.68)	1.137 (0.67)	-1.324 (2.09)*
Government Experience , Not Legislative	-0.270 (0.10)	-14.921 (0.88)	1.054 (0.64)	0.681 (1.22)	0.694 (0.14)	21.784 (1.00)	1.186 (0.74)	-0.816 (1.17)
Career in law	-2.673 (1.97)*	-11.121 (0.98)	-1.183 (0.99)	-0.210 (0.30)	12.828 (1.76)	26.039 (1.50)	-1.931 (1.86)	-0.483 (1.01)
Life long Political Career	-4.906 (2.16)*	-24.484 (1.06)	-0.308 (0.13)	-1.128 (1.06)	2.731 (0.59)	-39.055 (1.74)	0.143 (0.09)	1.767 (1.11)
Career in Education	0.638 (0.20)	22.237 (1.22)	2.378 (1.18)	-1.029 (1.07)	1.887 (1.08)	-5.004 (0.34)	-0.092 (0.06)	0.145 (0.38)
From the Census South	-1.987 (1.53)	-25.738 (2.55)*	0.515 (0.42)	-0.312 (0.52)	-5.314 (1.44)	6.132 (0.40)	0.440 (0.34)	0.207 (0.46)
Seniority	0.347 (4.05)**	-0.702 (1.25)	0.116 (1.96)	0.145 (2.16)*	0.487 (4.31)**	1.808 (1.81)	0.040 (0.66)	0.049 (0.91)
Constant	15.672 (5.21)**	194.232 (7.92)**	5.163 (2.33)*	5.522 (7.28)**	16.110 (2.30)*	141.663 (4.37)**	6.640 (1.80)	9.676 (7.56)**
$R^2$	0.14	0.14	0.03	0.07	0.05	0.22	0.03	0.08
$N$	352	352	347	352	311	311	310	311

\*  $p < 0.05$ ; \*\*  $p < 0.01$

Ordinary least squares regression with t-ratios in parentheses

## **Summary and Discussion of the Results**

None of my hypotheses were clearly supported by the data, but parts of each hypothesis did stand in either one of the bodies or both. There were many inconsistencies in changes over time, which can most likely be explained by something other than gender. Despite those inconsistencies, there are many positive changes for women that appear when examining the differences between the 102<sup>nd</sup> and the 114<sup>th</sup> sessions. Here I will explain the clearest results from my hypotheses and what those results might suggest.

### *Hypothesis 1*

In the Senate, there are inconsistencies from year to year, but in the aggregate women sponsor and cosponsor more legislation than men over time. As their sponsorship and cosponsorship levels increase, the gap between women and men's levels grows in favor of women. In the House there is a trend toward women sponsoring and cosponsoring more than men over time, but the gap between women and men does not increase once women overtake men in sponsorship and cosponsorship levels.

This data shows that over time, the increase in the number of women in Congress does correlate with increased sponsorship and cosponsorship levels of women. Over the course of 25 years there has been a jump in how much legislation women sponsor and cosponsor in both the House and Senate. The same trend does not exist among men, suggesting that the increase in women's sponsorship levels is caused by something that does not affect men in the same way. Additionally, these observations indicate that women's confidence levels increase over time.

### *Hypotheses 2 & 3*

In both the House and Senate, *hypothesis 2* fails. Cosponsorship levels rise at a faster rate than sponsorship levels, meaning the ratio between the two increasingly favors cosponsorship over time. My hypothesis had been grounded in the idea that women would become more confident about their own work over time, sponsoring more of their own legislation, rather than getting their name on others' legislation. Instead, cosponsorship levels increase at a greater rate, which makes me question whose bills women are cosponsoring. Unfortunately, I do not have time to pursue that curiosity. Therefore, we learn that the increase of women in Congress does not have a greater impact on sponsorship averages than cosponsorship averages, if it has any impact at all.

Furthermore, the results of *hypothesis 3* fail to show any clear distinction between men and women when it comes to sponsorship and cosponsorship ratios. In the Senate men's cosponsorship and sponsorship levels are so inconsistent that no trend can be seen. In the House, when sponsorship levels increase, cosponsorship levels increase at a faster rate. This follows the same trend that occurs with women, which I had not predicted would happen. From this analysis, there appear to be no substantial advancements in our understanding of confidence.

### *Hypothesis 4*

Both parts of my hypothesis on effectiveness fail for sponsorship in the House and Senate. In regards to cosponsorship, I am partially correct. If we examine the 25-year period, there are inconsistencies in the increase of female effectiveness over time. Between the 102<sup>nd</sup> and

114<sup>th</sup> sessions, there is a general trend that women become more effective than men over time when cosponsoring in the Senate.

In the Senate, women now get their names on bills that are passed into law on average more than men do. However, the data showing that my hypothesis fails in each of the other scenarios suggests that there is no consistent correlation between the increase of women in Congress and increased effectiveness of women's sponsorship and cosponsorship. In other words, there is no clear trend in effectiveness of women's confidence over time in Congress.

### *Hypothesis 5*

My hypotheses on the significance of gender fail. In the House gender is a positive predictor for sponsorship and cosponsorship, and in the Senate only for cosponsorship. The number of women in Congress only has a significant impact on the effectiveness of cosponsorship in the Senate. Seniority is the most significant predictor of sponsorship, cosponsorship, and effectiveness in the aggregate across all regressions that I ran. As women become more senior, this should affect their behavior. Legislative experience and southern-ness are also recurring negative predictors, which appear, from the data collected, unexplainable.

### **Understanding the Results**

In the aggregate, women sponsor and cosponsor more legislation than men over time. Neither men nor women are significantly more effective in passing the legislation they sponsor or cosponsor. Seniority plays a powerful role in passing legislation. As more women enter Congress, women's average seniority will increase, most likely impacting their effectiveness levels. It is important to remember that while women sponsor and cosponsor more legislation,

they have no true power over the passage of that legislation, aside from gaining supporters. Sponsoring/cosponsoring in and of itself is an act of confidence, and as more women enter Congress, there is an increasing trend in women gaining confidence, despite minor inconsistencies from year to year.

### **Context to (Co)Sponsorship**

From the data it is clear that gender is not the only factor, and often not a factor at all, in increasing and decreasing sponsorship and cosponsorship levels and effectiveness. Demographics are also not the only cause for these changes. Political and societal context can greatly factor into the results. What I ignore in my demographic data is the position of Congress during these sessions. What I mean by that is: what parties are in the majority and who is president? While I cannot pursue that analysis here due to time constraints, it is important to understand the political context that might have had an influence on the results.

Sponsorship, cosponsorship, and effectiveness levels most commonly peaked in the 108<sup>th</sup> session in my analysis. This was the session in which George W Bush, a Republican President, had a Republican House and Senate. Therefore, there was most likely less gridlock than in years where the Congressional bodies were divided or the legislative and executive branches were divided by party. This could be a factor in influencing how many bills were introduced and then how many of those passed, and it could also play a role in which party was more effective in sponsorship and cosponsorship. If we examine this idea in more depth, the only other session in the sample in which both bodies of Congress and the president were of the same party was the 111<sup>th</sup>, when Obama had a Democratic Congress. Effectiveness is particularly high among women in the Senate in this session, and in the aggregate sponsorship and cosponsorship are high in the

111<sup>th</sup> session compared to other sessions. Sponsorship and cosponsorship levels and effectiveness appear on the aggregate low in the 114<sup>th</sup> session compared to other sessions. This is the session that just ended, and in which we saw intense gridlock. Additionally, we experienced long presidential and Congressional races for the 2016 election. This might have affected how much time members of Congress had and were able to devote to legislation. Of course, this is all speculation, but thinking about context can lend to our understanding of the results.

## **Conclusion**

Despite the contradictions to many of my hypotheses, the results of my data extend our understanding of gendered behavior in Congress. Scholarship on gendered differences in the effectiveness of members has not been focused on how these differences change over time. In my study, I analyze how the confidence of male and female members varies across a 25-year period. After comprehensive data analysis, it is clear that gender does not have the impact on confidence levels in Congress that I predicted it would have. Over time, being a woman does correlate with increased confidence in the aggregate, but this trend is not statistically significant. However, before my research, there was no existing scholarship on how this relationship changes from session to session in Congress.

Jeydel and Taylor (2002) did perform a study on effectiveness of Representatives, but they only sampled data from the 103<sup>rd</sup> to the 105<sup>th</sup> session. They did not examine the data separately for each session. They performed similar analysis to mine on sponsorship effectiveness, wherein they found the proportion of bills passed to introduced. They also analyzed money brought back to the district. Their results showed that committee assignment was more significant than gender in how effective members were. While I did not control for

committee assignments, I did control for seniority, which had a more significant effect than gender in my analysis. Regression analysis shows that women do significantly sponsor and cosponsor more bills on average than men in Congress, and the gap between women and men's levels appears to be increasing, but predictors such as seniority also have a major impact on the dependent variables. Moreover, levels of effectiveness are very inconsistent, and regression analysis makes it clear that gender, in the aggregate, does not have a significant impact on effectiveness. My results both support and extend Jeydel and Taylor's by examining effectiveness over time. Additionally, I sampled data from the Senate, not just the House, and I not only focused on effectiveness but also cosponsorship and sponsorship levels. No previous scholarship had been so comprehensive.

It is also important to point out limitations in the data collection. As mentioned at the beginning of this chapter, my sampling method allowed for some oversampling in the proportion of women to men, and representatives to senators, within each session. This does not mean the data is necessarily skewed, but it could lead to errors if the numbers were not large enough to show an accurate representation of Congress. Moreover, I collected most of my sponsorship data in October and November, which left out the last few months of the 114<sup>th</sup> session. When I went back to check these numbers later, the changes seemed small enough that I did not take the time to re-enter numbers into my data set. It is unlikely that this would have changed the results. Human error should also be considered. I created a coding system for the demographic factors and entered all data into spreadsheets by hand. After thorough reviews of the spreadsheets, there were no glaring errors. Finally, if women are sponsoring more legislation, then they have to pass more of that legislation than men do in order to match men's proportions for effectiveness. For example, if men sponsor 10 bills, women sponsor 16 bills, men get 5 bills passed, and women

must then pass 8 bills in order to appear as though they are just as effective as men. This could be a flaw in the methodology, but considering the insignificance of effectiveness shown in the regressions, I do not believe this caused discrepancies in the data. Additionally, this is the same method that Jeydel and Taylor (2002) used to measure effectiveness.

It is apparent that behavior changes over time, but the root cause of those changes is not gender. As the number of women in Congress increases, there are trends towards an increase in female confidence. There are also instances where gender has no impact on increased confidence, particularly on women's effectiveness. Seniority, race, party, and legislative/government experience are all important predictors in legislative behavior. Gender inequality, and the way in which it changes over time, does not have the effects I hypothesized. However, it is important to note that women do cosponsor and sponsor more legislation than men, and this trend continues over time, despite some inconsistencies.

While seniority is a major factor in the passage of the bills sponsored and consponsored, women do get more legislation to the floor. They might not be able to control whether or not that legislation passed, but they make sure their ideas are heard by the body. This behavior shows that women are confident in their ideas, and this confidence increases over time. It also means that increasing the number of women in Congress does have a positive effect on women's behavior. Women are more willing to be heard and to share policy proposals as they are increasingly surrounded by other women.



## **Chapter 5**

### **Understanding Gendered Volubility**

#### **Introduction**

In this chapter I discuss my analysis of the effect of gender on legislators' volubility, that is, the frequency and length of their speeches on the floor of their respective chambers. I begin by describing my sample, which is a comprehensive set of data on Congress members' speech length and frequency from sampled legislation over 20 years. Included in the data set is an immense amount of demographic information on the members. After reviewing the sample and the rationale behind my sampling method, I delve into analysis of the data. I outline six hypotheses in this chapter, and the results for each of the hypotheses follow. Finally, I conclude with an explanation of how the evidence from my results expands the field of gendered behavior in politics.

Moreover, I discuss confidence again in this chapter. I hypothesized that as the number of Congresswomen increases over time, Congresswomen will become more confident, or will have increased reassurance in themselves. In this chapter I define increased speech length and frequency as increased confidence.

#### **Sampling Frequency and Length of Floor Speeches**

##### *Explanation of Sampling*

I used the following criteria for my sample. I planned to sample from the same five sessions as with sponsorship, but time and resources were limited, which meant I only sampled from four Congressional sessions: 102<sup>nd</sup>, 105<sup>th</sup>, 108<sup>th</sup>, and 111<sup>th</sup>. These sessions span the time period from 1991 to 2011. For several reasons, I chose to sample five significant bills from five

policy categories per session. First, I wanted the length and frequency of speeches for each member to be in context to specific bills. Had I sampled legislators and then examined each of their speeches in a specific session, I would have had the average length and frequency of speeches for an entire session for specific members. Instead, I have the average length and frequency of speeches per bill. Therefore I am able to distinguish between types of bills, or policy issues, on which members speak more or less often.

Second, I sampled “significant legislation” because it was less likely to be focused on one region or on an issue that few members cared to discuss. I adopted Stephan Stathis’ *Landmark Legislation 1774-2012: Major U.S. Acts and Treaties* to define significant legislation based on advice from the Digital Reference Section of the Library of Congress. Stathis selected the bills in his book based on their historical impact and the important precedents they set. “When passed they represented a recognition of needed action and guidance to administrative entities, a significant departure from previous policy, a creative response to an emergency, or a solution to a long-standing national concern” (Stathis 2014, p. vii). My definition of significance rests on whether the bills were on accessible, important issues. The historical importance of the legislation in Stathis’ book means these bills match my definition of significance. More members would likely speak on these issues. Therefore I should have a larger number of members in my sample with significant legislation than I would have by sampling completely random legislation.

Finally, I determined policy area by categorizing the policy from the Congressional Record website. I placed each policy type into groups with similar characteristics, and then I assigned each of these groups one of the following category titles: foreign affairs, economy, family, environment, and government and laws. There were too many categories on the

Congressional Record website to examine policy under each, and many of the bills had overlapping themes. Therefore it made sense to create a simpler categorization system. I grouped each piece of legislation from *Landmark Legislation* for each year in my sample into the five categories listed above. Then I randomly picked one bill from each category for each session. Not all bills fit in every category. These I titled miscellaneous and I did not sample from this group. I found the full text of floor speeches for the bills in my sample on Congressional Proquest.

### *Men and Women Breakdown*

My sample contains every women and man who spoke on the Congressional floor in the House and Senate on each piece of legislation that I sampled. There are a total of 541 men and 102 women in my sample. As in *Chapter 4*, the data set also includes information on a number of personal characteristics of these members across the four sessions. These characteristics include: race, party, prior occupation, prior office, region in which the member serves, and seniority.

Table 5.1 shows the breakdown of men and women in the House and Senate who spoke on the floor for the bills in my sample. The number of women who speak increases over time in both the House and Senate. I expected this because women increase in numbers in Congress over time. The percentage of men in the Senate in my sample decreases over time from the 102<sup>nd</sup> to the 108<sup>th</sup> session, but then increases slightly in the 111<sup>th</sup> session. The percentage of women in the Senate increases steadily until the 111<sup>th</sup> and slightly decreases from the 111<sup>th</sup> to the 114<sup>th</sup> session. Over the 20-year period, the percentage of women in the House almost triples and in the Senate it increases eight-fold. Not all women and men in the House and Senate spoke on the legislation I sampled. However the ratio of women to men who speak on the floor in my sample are similar to

the ratios in the entire Congress during these sessions. This illustrates that, based on my sample, neither women nor men are speaking disproportionately more or less than the other gender.

### *House and Senate Breakdown*

Table 5.1 also shows the breakdown of members in the House and Senate. Members are categorized into House and Senate based on the body in which they served during each session. For example, if a member was in the House in the 102<sup>nd</sup> session, but the Senate in the 105<sup>th</sup> session, they were coded as members of separate bodies for each session in my data set. Therefore, my sample should have accurate data on whether or not members of one body have longer or more frequent speeches.

*Breakdown of Women and Men who Spoke in Each Session in the Bills in My Sample (Table 5.1)*

Session	House		Senate	
	Men	Women	Men	Women
102	147 (91%)	15 (9%)	82 (98%)	2 (2%)
105	122 (81%)	28 (19%)	79 (91%)	8 (9%)
108	129 (79%)	35 (21%)	32 (80%)	8 (20%)
111	124 (75%)	41 (25%)	74 (84%)	14 (16%)

The number of members in my sample in both the House and Senate remains consistent across the sessions, excluding the 108<sup>th</sup> session in the senate, which has substantially fewer members who spoke than all other sessions. There are slightly fewer members in the 102<sup>nd</sup> than the 111<sup>th</sup> session. This means that, based on the legislation I sampled, over time the number of members speaking on legislation does not vary much. The data I collected on these members, once analyzed, shows whether or not there are changes in the amount that each of these members speaks as more women enter Congress.

### *Legislation: Policy Categories and Specific Bills*

I randomly sampled 20 significant bills, five per session, selected from the five policy categories. The policy categories are: foreign affairs, environment, family, economy, and government and laws. Table 5.2 shows the bills in each session, the policy categories to which they were assigned, and their status. In the 102<sup>nd</sup> session, four of the five bills were generated in the Senate. In the 105<sup>th</sup> session, two of the five bills were generated in the Senate. In the 108<sup>th</sup> session, three of the five bills were generated in the Senate. In the 111<sup>th</sup> session, four of the five bills were generated in the House. Therefore nine bills were generated in the Senate and 11 in the House. Additionally, one bill in the 105<sup>th</sup> session died in the House after being passed in the Senate but was replaced by a similar bill that passed. One bill in the 108<sup>th</sup> session and one bill in the 111<sup>th</sup> session died in the Senate after being passed in the House but were replaced by similar bills that passed.

My sample size of legislation is slightly larger for the House than the Senate. There were certain bills not discussed in the House or Senate beyond parliamentary procedure before a vote. Considering I did not count words or speeches on parliamentary procedure, there are certain bills in my sample on which members in only one of the two bodies spoke. Three of the bills I sampled were only discussed in the House. One of the bills I sampled was only discussed in the Senate. I examined speeches from 20 bills, but 17 of those were discussed in the Senate and 19 were discussed in the House. I also collected data on speeches from legislation that followed bills that were not enacted. That is, I examined speeches on the three bills that were not passed but rather superseded by legislation from the other body, and I observed the speeches on the legislation from the other body as well.

***Bills in the Sample: Policy Area and Status (Table 5.2)***

Session	Bill	Category	Status
102	S. 2532 - Freedom for Russia and Emerging Eurasian Democracies and Open Markets Support Act of 1992	Foreign Affairs	Passed
102	S. 419 - Resolution Trust Corporation Funding Act of 1991	Economy	Passed
102	S. 1754 - United States Commission on Civil Rights Reauthorization Act of 1991	Government & Laws	Passed Senate, Died in House
102	S. 1002 - Child Support Recovery Act of 1992	Family	Passed
102	H.R. 776 - Energy Policy Act of 1992	Energy	Passed
105	S. 947 - Balanced Budget Act of 1997	Economy	Died in House – instead passed H.R. 2015
105	H.R. 867 - Adoption and Safe Families Act of 1997	Family	Passed
105	H.R. 4655 - Iraq Liberation Act of 1998	Foreign Affairs	Passed
105	S. 830 - Food and Drug Administration Modernization Act of 1997	Environment	Passed
105	H.R. 2676 - Internal Revenue Service Restructuring and Reform Act of 1998	Government & Laws	Passed
108	H.R. 760 - Partial-Birth Abortion Ban Act of 2003	Family	Died in Senate – instead passed S. 3
108	H.R. 2622 - Fair and Accurate Credit Transactions Act of 2003	Economy	Passed
108	H.R. 5107 - Justice for All Act of 2004	Government & Laws	Passed
108	S. 437 - Arizona Water Settlements Act	Environment	Passed
108	S. 2845 - Intelligence Reform and Terrorism Prevention Act of 2004	Foreign Affairs	Passed
111	H.R. 4872 - Health Care and Education Reconciliation Act of 2010	Family	Passed
111	H.R. 2965 - Don't Ask, Don't Tell Repeal Act of 2010	Government & Laws	Passed
111	H.R. 3221 - Don't Ask, Don't Tell Repeal Act of 2010	Economy	Passed
111	H.R. 5297 - Small Business Jobs Act of 2010	Foreign Affairs	Passed
111	S. 510 - FDA Food Safety Modernization Act	Environment	Passed Senate, but superseded by H.R. 2751

\*Source: Congressional ProQuest

### *Demographics Described*

As seen in Table 5.3, my sample contains twice as many women among Democrats than Republicans in both the House and Senate. Among men in the Senate, there are an almost equal number of Democrats and Republicans, and there is one Independent. In the House, among men there are ten percent more Democrats than Republicans. The number of members in each party in my sample is proportionally similar to the number of members in each party in the whole Congress. In my sample, Democrats are in the majority and in Congress Democrats held the

majority in two of the four sessions. In Congress there are more female Democrats than female Republicans.

***Descriptive Characteristics of the Entire Sample (Table 5.3)***

Descriptive Characteristics		House		Senate	
		Men	Women	Men	Women
<b>Party</b>	<i>Republican</i>	168 (45%)	23 (27%)	82 (49%)	5 (28%)
	<i>Democrat</i>	207 (55%)	61 (73%)	83 (50%)	13 (72%)
	<i>Independent</i>	0 (0%)	0 (0%)	1 (1%)	0 (0%)
<b>Occupation (Top 3)</b>	<i>Law</i>	117 (31%)	17 (20%)	80 (48%)	4 (22%)
	<i>Only Politics</i>	38 (10%)	10 (12%)	11 (7%)	5 (28%)
	<i>Military</i>	30 (8%)	1 (1%)	19 (11%)	0 (0%)
<b>Prior Office (Top 3)</b>	<i>State Representative</i>	88 (23%)	18 (21%)	18 (11%)	5 (28%)
	<i>State Senator</i>	85 (23%)	16 (19%)	30 (18%)	4 (22%)
	<i>No Prior Office</i>	58 (15%)	9 (11%)	26 (16%)	3 (17%)
<b>Region (Top 3)</b>	<i>Pacific</i>	53 (14%)	25 (30%)	13 (8%)	5 (28%)
	<i>South Atlantic</i>	55 (15%)	12 (14%)	28 (17%)	2 (11%)
	<i>East North Central</i>	78 (21%)	12 (14%)	11 (7%)	1 (6%)
<b>Race</b>	<i>White</i>	332 (88.5%)	65 (77%)	163 (98%)	17 (94%)
	<i>Black</i>	23 (6%)	13 (16%)	1 (.6%)	1 (6%)
	<i>Hispanic/Latino</i>	10 (3%)	2 (2%)	0 (0%)	0 (0%)
	<i>American Indian/Alaskan Native</i>	0 (0%)	0 (0%)	1 (.6%)	0 (0%)
	<i>Native Hawaiian/Pacific Islander</i>	4 (1%)	0 (0%)	0 (0%)	0 (0%)
	<i>Asian</i>	4 (1%)	4 (5%)	1 (.6%)	0 (0%)
	<i>Other</i>	2 (.5%)	0 (0%)	0 (0%)	0 (0%)
<b>Seniority</b>	<i>(Average in years)</i>	11.2	8.7	16.4	12.3

\*Source: Congressional Biographical Directory

In both the House and Senate, the vast majority of men and women are white. In the House, among women non-whites comprise 23% of the sample, and among men they make up 12% of the sample. In the Senate, non-whites make up 1% of the sample of women, and 2% of the sample of men. The small number of racial minorities is representative of the larger Congress. The regions from which members came were dispersed, but there were three regions

from which the most members came in the aggregate in both the House and Senate. These are the Pacific, South Atlantic, and East North Central regions. In the sample, the occupations that most members had before entering politics were in the fields of law, military, and a lifetime career in politics. Among men and women in the House and men in the Senate, the number of members with law professions far exceeded the number of members in any other career field. Among men in the Senate, there were more men with careers in the military than were only involved in politics. The three most common prior offices are state representative, state senator, and no prior office. If a member was recorded as no prior office, it means that Congress was the first office in which they served. Finally, I collected data on seniority, which was the number of years in which members served from the first year of the session they began serving to the second year of the session in which they spoke in the sample. I define members who served longer as members with greater seniority. Men in the House have greater seniority than women in the House, and men in the Senate have greater seniority than women in the Senate. However, women in the Senate have greater seniority than men in the House.

### **Hypotheses and Results: Volubility**

*Hypothesis 1: Over time, women will speak more frequently and their speeches will be longer.*

I wanted to evaluate whether the average number of times women speak per bill and the average number of words per speech increases across the sessions. Therefore, I divided the total number of speeches made by women for each bill by the total number of women in Congress during the session in which the bill was introduced on the Congressional floor. This gave me the average frequency of speeches for each woman on each bill. I also divided the total number of words I recorded for women in each session by the number of speeches women gave in each



session. This yields the average length of each of those speeches. I then calculated the mean of all speech frequency averages per bill to obtain a generalizable average speech frequency for any given bill in a particular session.

The average speech length per session in the House and Senate for women and men is shown in Figure 5.1. Among women in the Senate there is no consistent increase in speech length over time, but in the 111<sup>th</sup> session the average is much higher than in the 102<sup>nd</sup> session. In the House, average speech length is highest in the 102<sup>nd</sup> session, and there is no consistent trend over time. Moreover, average speech length in the House is much smaller than in the Senate. This shows that the increasing number of women might not have an impact on speech length, but the body of Congress does<sup>4</sup>. However, when examining the 20-year period, average speech length among women increases in the Senate and decreases in the House, meaning my hypothesis is partially supported by data from the Senate, but not from the House.

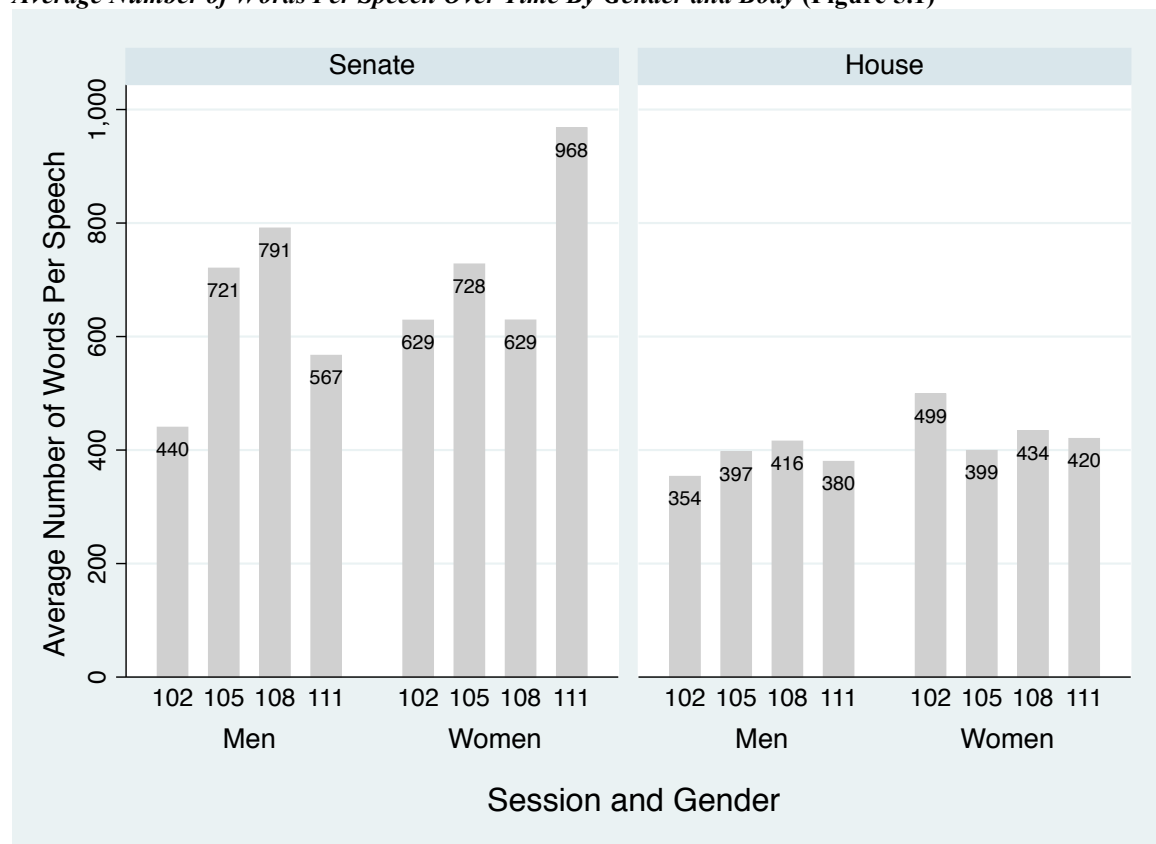
The average frequency of speeches per bill across sessions in the House and Senate for women and men is shown in Figure 5.2. Women's average speech frequencies in the House and Senate do not support my hypothesis. In the Senate the average number of speeches per bill increases from the 102<sup>nd</sup> to the 108<sup>th</sup> session, but then decreases dramatically in the 111<sup>th</sup> session. The average speech frequency per bill in the 108<sup>th</sup> session is more than double that of any other session in the Senate. As with words per speech, there are fewer speeches per bill in the House than the Senate for all sessions. In the House, women's average speech frequency is highest in the 105<sup>th</sup> session, but there is no consistent trend in average speech frequency. In summary, the data does not generally support my hypothesis, although average speech frequency does increase

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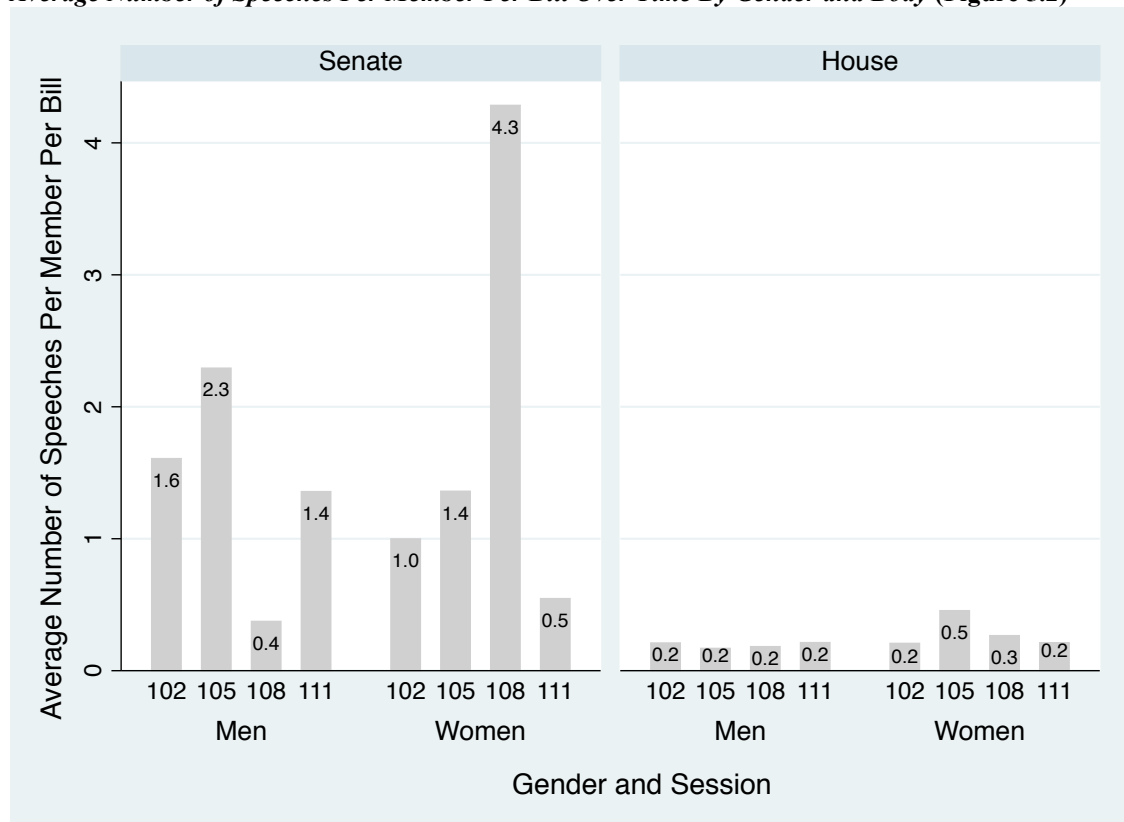
<sup>4</sup> In the Senate, on normal legislation the members establish time agreements to decide allotted time for speeches. In House, minority and majority floor managers control time. Members' speech length is much more regulated in the House, "often confined to one-minute speeches, morning hour, and special orders" (Pearson and Dancey 2011).

in the Senate until the decrease in the 111<sup>th</sup> session. Excluding the 102<sup>nd</sup> session, average speech frequency decreases in the House. The increasing number of women in Congress over time does not show a direct impact on the average length or frequency of female member speeches on the Congressional floor, but there do appear to be some inconsistent trends in the data. That is, there is no steady increase or decrease across the 25-year period, but changes over time do not appear random. Rather, there are periods of increasing trends in the Senate and decreasing trends in the House that do not carry out across all sessions in the sample.

*Average Number of Words Per Speech Over Time By Gender and Body (Figure 5.1)*



*Average Number of Speeches Per Member Per Bill Over Time By Gender and Body (Figure 5.2)*



*Hypothesis 2: Over time, men will speak more frequently and their speeches will be shorter.*

I wanted to evaluate whether the increasing number of women has an impact on how frequently and for how long men speak. Based on scholarly literature, I thought that the more women spoke, the more men would speak in reaction. However, I was not confident that an increased reaction in speech frequency would necessarily mean an increased amount of content in each speech. Rather I hypothesized that as men spoke more frequently in reaction to women, the content of their speeches would decrease in length. I calculated the average number of times men spoke per bill in each session and the average number of words per speech. As with women, I divided the total number of speeches made by men for each bill by the total number of men in each chamber of Congress during the sessions in which the bills were introduced. This yielded the average number of speeches each man gave per bill in each session. I also divided the total

number of words I recorded for men in each session by the number of speeches men gave in each session. From this I obtained the average speech length in each session. I then found the mean of the frequency averages per bill to get a generalizable average speech frequency for any given bill in a particular session.

The average speech length per session in the House and Senate for women and men is shown in Figure 5.1. Among men in the Senate the average word-count per speech increases until the 108<sup>th</sup> session. In the 111<sup>th</sup> session it dropped, but was still higher than in the 102<sup>nd</sup> session. As with women, in the House men's speech length is much shorter than in the Senate. The average speech length for men follows the same trend in the House as it did in the Senate, increasing and then decreasing. Therefore, men appeared to use an increasing number of words per speech over time until the most recent session in the sample. This contradicts my hypothesis.

The average frequency of speeches per bill across sessions in the House and Senate for women and men is shown in Figure 5.2. There do not appear to be any clear trends in the average number of speeches per bill for men. In the Senate, the average speech frequency increases, then decreases, and then increases again. Men's average number of speeches per bill is lower in the 111<sup>th</sup> session than the 102<sup>nd</sup> session. In the House, there are only minor changes in speech frequency from session to session in the sample. Therefore, there is no clear trend in the data. My hypothesis is contradicted by the data on average speech length, and it is also not supported by the data on speech frequency per bill over time.

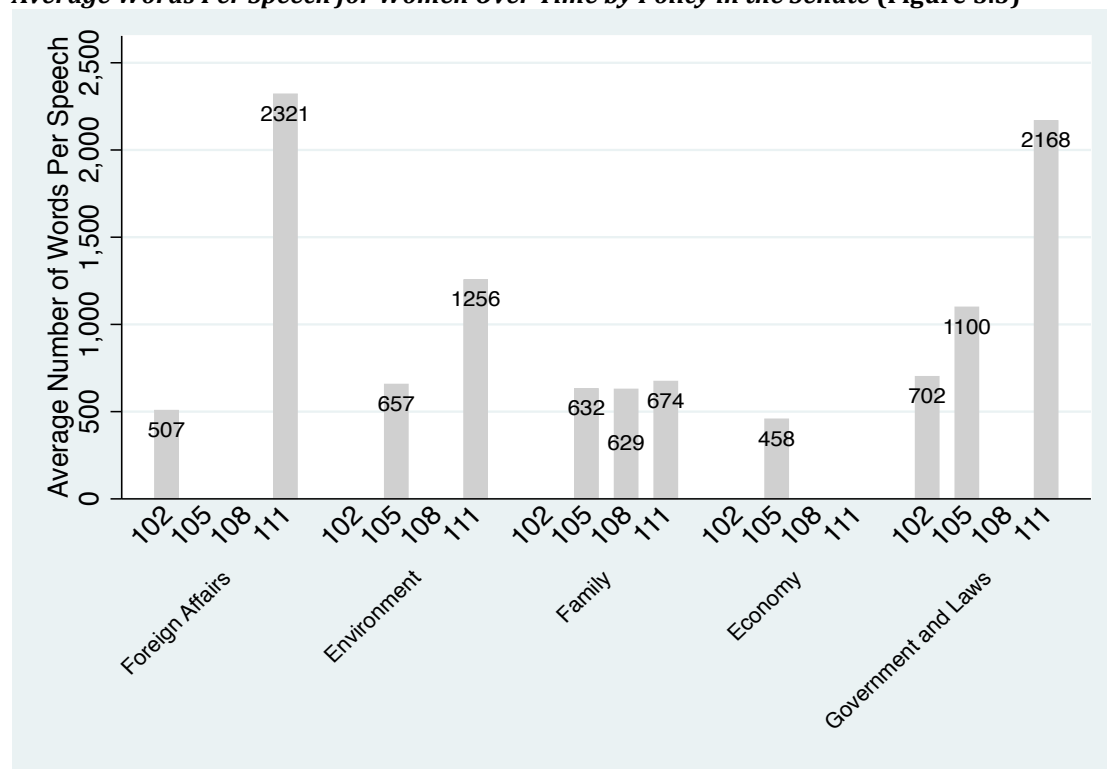
*Hypothesis 3: Women will speak less on "hard-power issues" than on "women's issues," but over time this trend will change and women will speak an equal amount on bills of various policy areas.*

This hypothesis implies that in the 102<sup>nd</sup> session women would have more frequent and longer speeches on legislation concerning family (“women’s issues”) than foreign affairs, economics, and government and laws (“hard-power issues”), and the reverse will be true for the 111<sup>th</sup> session. It is important to note that the category of family includes health and educational issues. I analyzed the data in the same way as Hypothesis 1, but I divided the average number of words per bill by the number of speeches for each bill. I also skipped the last step in finding the average of the averages for speech frequency. My focus was on individual bills and their associated policy areas. Additionally, the graphs in which data is missing for certain sessions shows that either women did not speak on that issue or that the bill was not discussed in one of the bodies.

The average length of speeches on bills in each policy area for women in the Senate is shown in Figure 5.3. Due to missing data it is difficult to examine clear trends. My small sample size is at fault here, which was severely limited by time. The average number of words per speech on foreign affairs is only shown in the 102<sup>nd</sup> and 111<sup>th</sup> sessions, but it is much higher in the 111<sup>th</sup> session. Among bills on family, the average speech length increases very slightly from the 105<sup>th</sup> to the 111<sup>th</sup> session. My sample appears to contain data for women’s speeches in the Senate on the economy only in the 105<sup>th</sup> session, but women simply did not speak in the 102<sup>nd</sup> and 108<sup>th</sup> sessions. It is interesting to note that women had nothing to say about the economy on bills in these two sessions. My sample had no bills on the economy discussed in the 111<sup>th</sup> session. Aside from the lack of speeches by women in the 108<sup>th</sup> session on government and laws, there is an increasing trend over time in this policy category in women’s speech length. When examining the 20-year period, there is also an increase in speech length among bills on foreign affairs, the environment, and family. This partially supports my hypothesis in that women’s

speeches are longer over time on government and laws and foreign affairs, or some of the hard-power issues. However, this increase also slightly occurs with family, or women's issues.

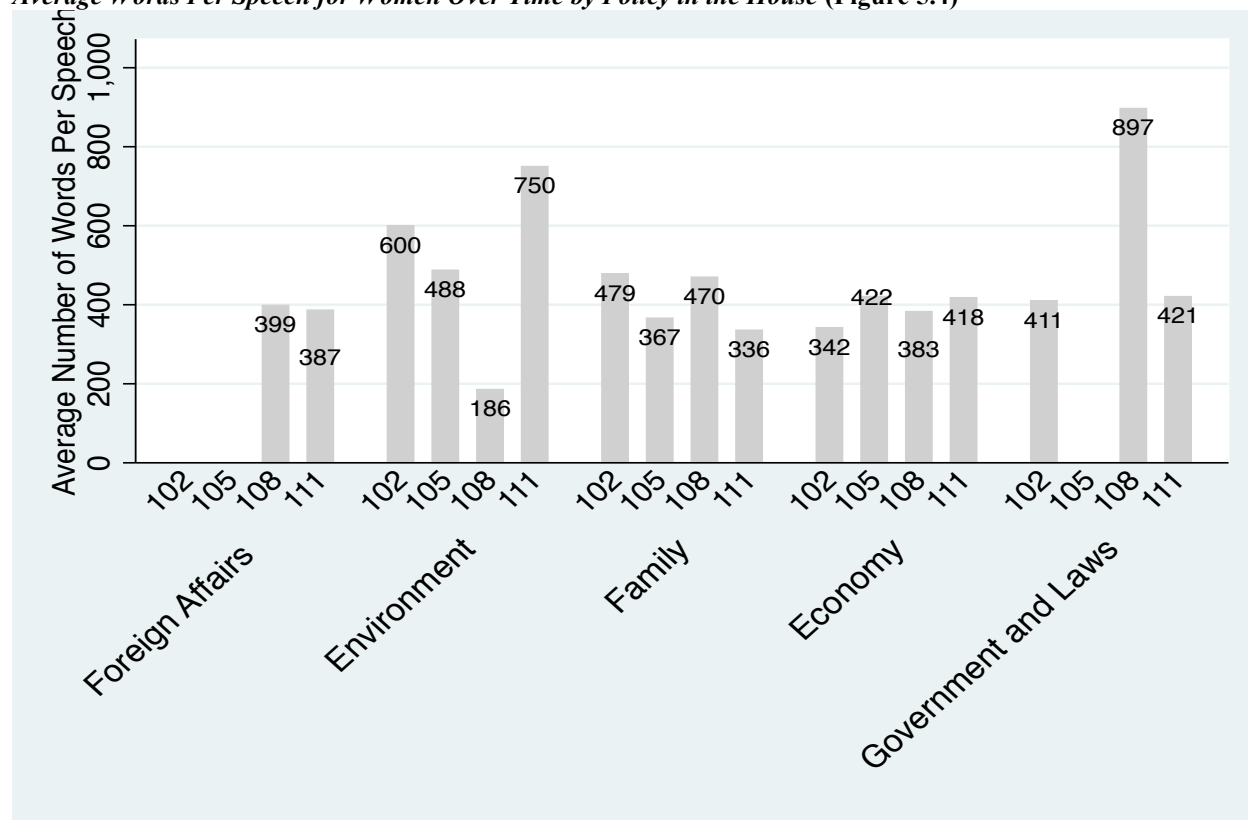
**Average Words Per Speech for Women Over Time by Policy in the Senate (Figure 5.3)**



My analysis on the length of speeches on bills in each policy area for women in the House is shown in Figure 5.4. There are no consistent trends over time for speech length in any of the policy areas. Women speak on foreign affairs only in the 108<sup>th</sup> and 111<sup>th</sup> sessions, and the average number of words per speech is almost equal for the two sessions. There is a decreasing trend in the average speech length on bills concerning family. Women use almost the same number of words per speech on government and law bills in the 102<sup>nd</sup> and the 111<sup>th</sup> sessions. There is a spike in the 108<sup>th</sup> session in this policy category, but there is no consistent trend. There is an increasing trend in bills on the economy. Women's average speech length peaks in this category in the 105<sup>th</sup> session, but it does increase from the 102<sup>nd</sup> to the 111<sup>th</sup> session. Therefore, the trends in speech length over time in the House are on bills concerning the environment,

family, and the economy, but they are all inconsistent. My hypothesis is partially supported by the decreasing trend of women's speeches on women's issues and increasing trend of speeches on the economy.

*Average Words Per Speech for Women Over Time by Policy in the House (Figure 5.4)*



My hypothesis that women will have equal speech lengths across all policy areas over time is not confirmed in my data on the House or Senate. The difference in speech lengths among various policy issues follows no consistent trends over time. Put differently, the increasing number of women in the House and Senate has not caused women to use an equal number of words on bills across all policy areas.

I conducted a similar analysis of the average number of speeches for female members on each bill within each policy area in the House and Senate. A presentation of these results would

require an additional set of graphics, so here I provide a verbal summary only.<sup>5</sup> In my sample, bills on foreign affairs were discussed in the House for all sessions excluding the 102<sup>nd</sup>. However, women have no speeches on these bills in the 105<sup>th</sup> session, and they barely speak on this policy area in the 111<sup>th</sup> session. Therefore there is no clear trend in speech frequency on foreign affairs bills. From the 105<sup>th</sup> to the 111<sup>th</sup> session there is a decreasing trend in the average number of women's speeches per family-related bill. This same trend occurs for speech frequency on bills concerning the economy. There is an inconsistent increase in the average number of speeches that female members make per government and law bill. The only moderately consistent trends appear to be in speeches for bills on family and the economy. Partially supporting my hypothesis, the average number of speeches that female members give on bills concerning family decreases over time. The decreasing trend in bills on the economy does not support the part of my hypothesis on hard-power issues. Average speech frequency does not reach equal levels among the various policy issues over time.

There are no clear trends in the data on the average number of speeches for female members on bills within each policy area in the Senate. There was no data from my sample on foreign affairs legislation in the Senate in the 105<sup>th</sup> and 108<sup>th</sup> sessions. Therefore, I am skeptical of the decreasing trend from the 102<sup>nd</sup> to the 111<sup>th</sup> session on speech frequency for bills on foreign affairs. Speech frequency on bills concerning family increases from the 102<sup>nd</sup> to the 108<sup>th</sup> session, but it then decreases in the 111<sup>th</sup> session. There is no consistent trend in women's average speech frequency on bills concerning government and laws. My hypothesis is not supported by the fact that there are no clear trends on speech frequency for hard power issues, and speech frequency for women's issue bills only decreases in the 111<sup>th</sup> session.

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<sup>5</sup> These graphics are available by request to the author.



My hypothesis is not supported by data on women's speech length and frequency. There are no consistent trends in the amount Congresswomen speak on certain issues. In the House, women's speech length follows inconsistent trends on bills concerning family and the economy, decreasing and increasing respectively, which lends some support to my hypothesis. Even allowing for the limits of my sample size, it is clear that over time women do not speak the same amount on every issue. From the sample I examined, it appears that factors other than the increasing number of women in Congress are affecting the amount women speak on each policy.

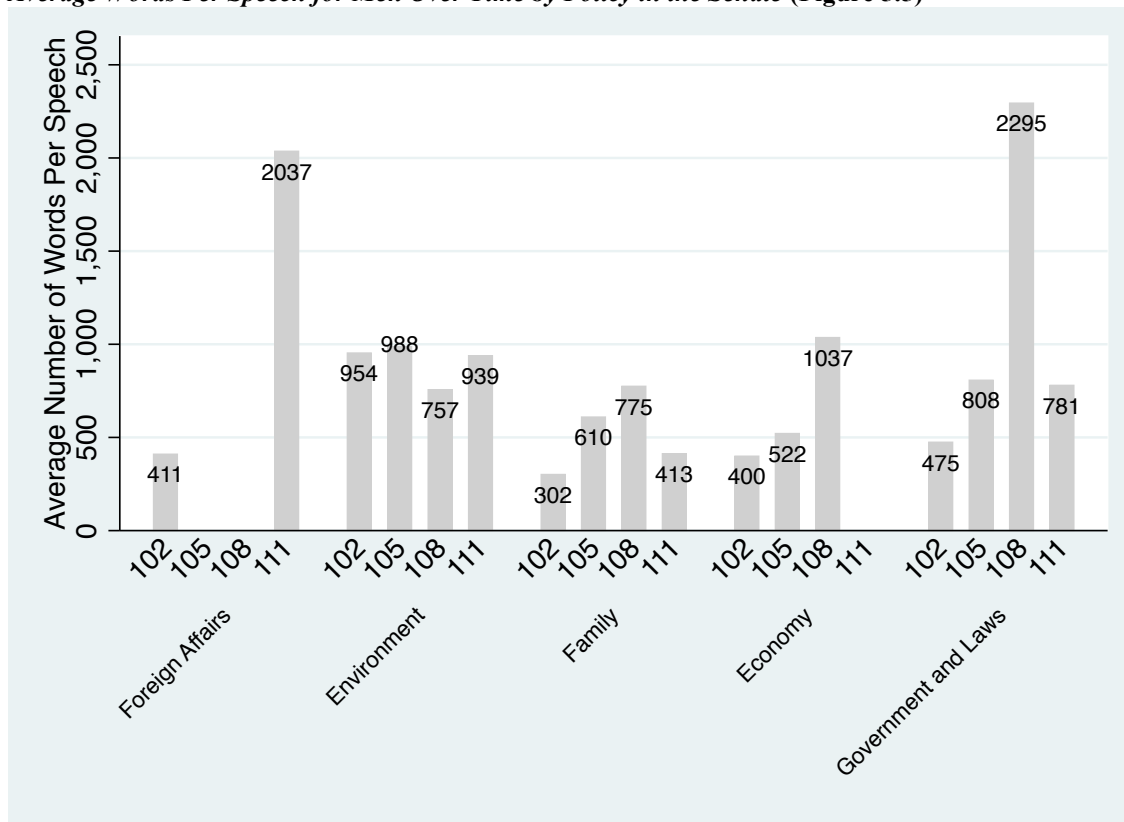
*Hypothesis 4: Men will speak less on "women's issues" than on "hard-power issues", but over time this trend will change and men will speak more on "women's issues".*

This means that in the 102<sup>nd</sup> session men would have more frequent and longer speeches on legislation concerning foreign affairs, the economy, and government and laws ("hard-power issues") than family ("women's issues"), and the reverse would be true for the 111<sup>th</sup> session. I analyzed the data in the same way as *Hypothesis 3*, but I divided the average number of words per bill by the number of speeches for each bill. I also skipped the last step in finding the average of the averages for speech frequency. My focus was on individual bills and their associated policy areas. Additionally, the graphs in which data is missing for certain sessions shows that either men did not speak on that issue or that the bill was not discussed in one of the bodies.

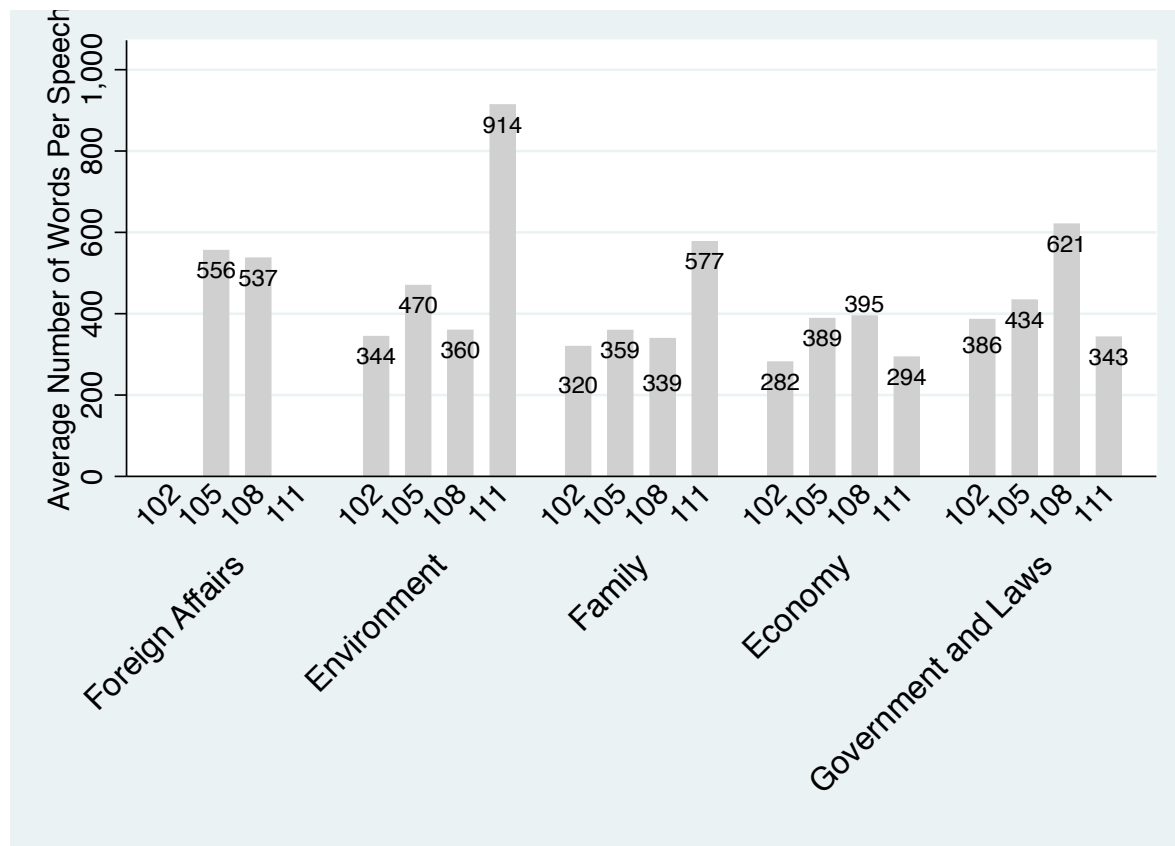
The average length of speeches on bills in each policy area for men in the Senate is shown in Figure 5.5. I did not collect data on foreign affairs legislation in the Senate for the 105<sup>th</sup> and 108<sup>th</sup> sessions, which means I only have average speech length in the 102<sup>nd</sup> and 111<sup>th</sup> sessions. Speech length is much higher in the 111<sup>th</sup> than the 102<sup>nd</sup> session in this policy category. Speech length remains rather constant for bills on the environment over time. Average speech

length among men on bills concerning family increases over time until the 111<sup>th</sup> session, when it decreases. I did not collect data on economy-related legislation in the Senate in the 111<sup>th</sup> session, but there is an increasing trend in speech length from the 102<sup>nd</sup> to the 108<sup>th</sup> session for bills concerning the economy. Speech length for government and laws bills follows a similar trend to that for family, where the average increases until the 111<sup>th</sup> session, when it decreases. This data supports part of my hypothesis. Over time the average speech length increases for bills on women's issues, but there is no consistent decrease with bills on hard-power issues.

*Average Words Per Speech for Men Over Time by Policy in the Senate (Figure 5.5)*



*Average Words Per Speech for Men Over Time by Policy in the House (Figure 5.6)*



The average length of speeches on bills in each policy area for men in the House is shown in Figure 5.6. I did not collect data on foreign affairs legislation in the House in the 102<sup>nd</sup> and 111<sup>th</sup> sessions, and therefore I only have data on the 105<sup>th</sup> and 108<sup>th</sup> sessions. Average speech length in these two sessions is similar. On bills concerning the environment, the average speech length follows an inconsistent increasing trend over time. Bills on family follow the same trend, with only a slight decrease in the 108<sup>th</sup> session. The average number of words per speech on bills concerning the economy and on government and laws follows similar trends, increasing until the 111<sup>th</sup> session, when it decreases. This partially confirms my hypothesis. The average speech length for bills on women's issues inconsistently increases over time, and there is a slight drop across the 20-year period in the average speech length for hard-power issues. Additionally, in the House average speech length on women's issues is higher than any of the hard-power

issues in the 111<sup>th</sup> session, whereas it had not been higher than any issues other than the economy in the 102<sup>nd</sup> session.

As with women, I conducted a similar analysis of the average number of speeches for male members on each bill within each policy area in the House and Senate. A presentation of these results would require an additional set of graphics, so here I provide a verbal summary only.<sup>6</sup> Legislation on foreign affairs in the Senate in my sample is only in the 102<sup>nd</sup> and 111<sup>th</sup> sessions, and the average speech frequency is lower in the 111<sup>th</sup> session on this issue. There is no consistent trend in bills on the economy. Among bills on family, men speak more frequently per bill over time, following a consistent trend. When examining the 20-year period, there is an inconsistent decreasing trend in average speech frequency for bills on government and laws. This supports my hypothesis. Men speak more times per bill on women's issues. They speak fewer times on each bill on hard-power issues over time in the Senate. In the 111<sup>th</sup> session, speech frequency is higher on women's issues than hard-power issues among men.

In the House, there is an increase in speech frequency on foreign affairs from the 105<sup>th</sup> to the 108<sup>th</sup> session, which are the only two sessions on which I have data in the House for this policy area. There is an increasing trend in average speech frequency for family until the 111<sup>th</sup> session, when the average decreases. After the 102<sup>nd</sup> session there is a drop in the average speech frequency for bills on government and laws, but then there is a consistent increase. There is no consistent trend with bills on the economy. This partially supports my hypothesis. Excluding the 111<sup>th</sup> session, men speak more frequently on bills concerning women's issues, and the average is higher in the 111<sup>th</sup> than the 102<sup>nd</sup> and 105<sup>th</sup> sessions. However, there are no truly clear trends in speech frequency averages on hard-power issues over time.

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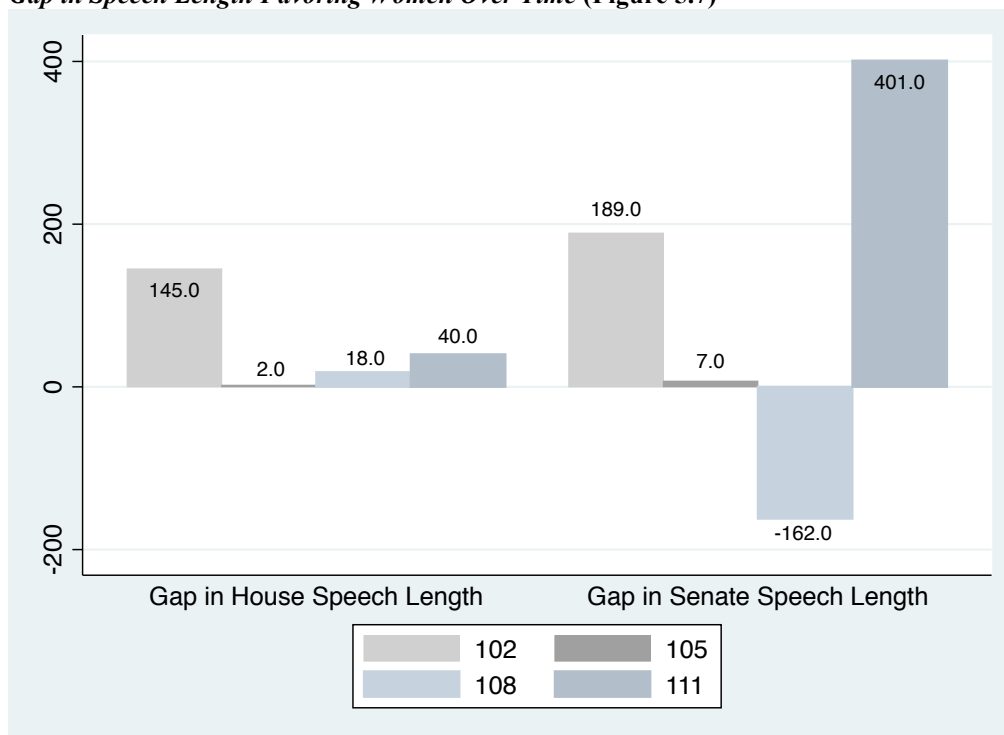
<sup>6</sup> These graphics are available by request to the author.

Therefore, there is no clear trend among men in the House and Senate on speech length and frequency, but there are instances in which my hypothesis stands. My hypothesis is partially supported by the data.

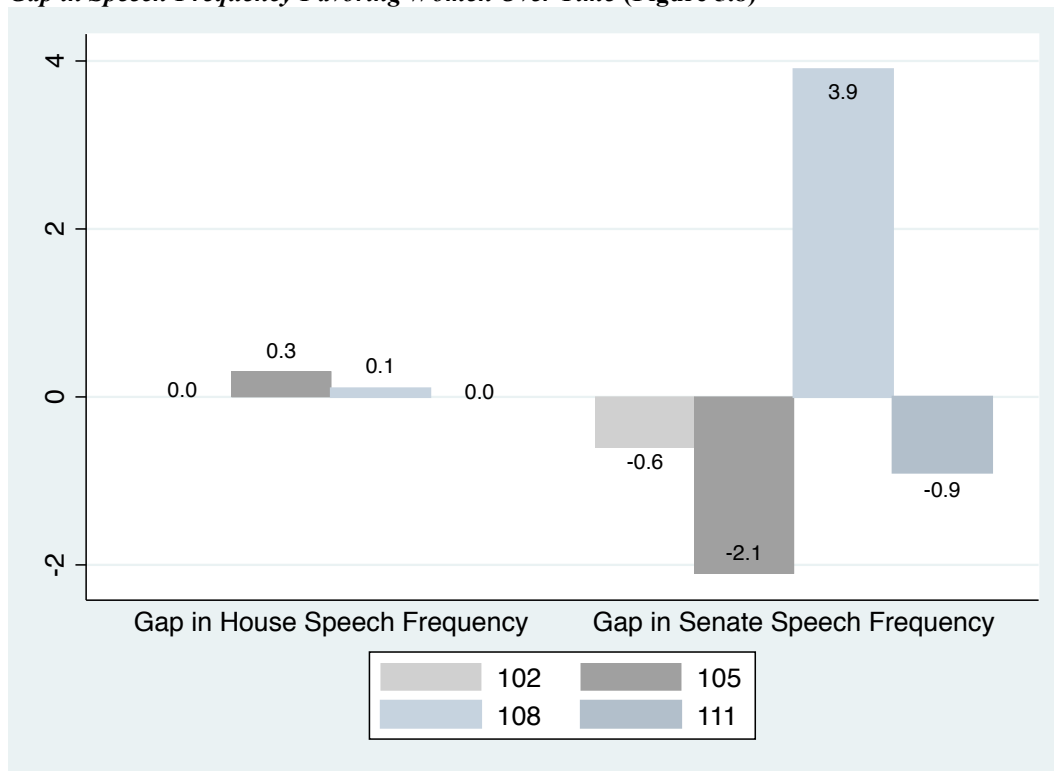
*Hypothesis 5: The proportion of women to men speaking on each bill will increase, meaning the volubility gap between women and men will decrease*

I wanted to evaluate whether the number and length of speeches per bill would increase at a higher rate among women than men over time. From the 102<sup>nd</sup> to the 111<sup>th</sup> session, the gap between the number and length of speeches that women and men give would decrease in size, making volubility more equal. I compared my data from *Hypothesis 1* and *Hypothesis 2* to test this hypothesis. The gap between men and women's speech length and frequency are shown in Figures 5.7 and 5.8.

**Gap in Speech Length Favoring Women Over Time (Figure 5.7)**



**Gap in Speech Frequency Favoring Women Over Time (Figure 5.8)**



In the Senate, women's average speech length is higher than men's in all sessions excluding the 108<sup>th</sup> session, which is the session in which women's average drops. The volubility gap between men and women increases from the 102<sup>nd</sup> to the 111<sup>th</sup> session, but in favor of women. In the House, women's average speech length is higher than men's in every session that I sampled. From the 102<sup>nd</sup> to the 111<sup>th</sup> session, the volubility gap does decrease because women speak less over time in the aggregate.

Average speech frequency in the Senate is higher among men in all sessions excluding the 108<sup>th</sup> session, when women's average frequency is more than eight times greater than men's. There is no consistent trend in changes of the volubility gap, though in the 111<sup>th</sup> session the gap is more in favor of men than it was in the 102<sup>nd</sup> session. In the House women's average speech frequency is slightly higher in the 105<sup>th</sup> and 108<sup>th</sup> sessions, but in the 102<sup>nd</sup> and 111<sup>th</sup> sessions

men and women have equal averages. Therefore the volubility gap is no different at the start of the 20-year time period than at the end.

Therefore, my hypothesis on volubility stands for speech length. The gap favors women more over time in the Senate and in the House it decreases. However, my hypothesis is not supported by the data on average speech frequency. The gap increases to favor men more in the Senate and does not change in the House.

*Hypothesis 6: The number of women in Congress will have a more significant impact than other identity characteristics on the trends in speech length and frequency.*

I pursue this question by estimating the effect of the number of women in Congress on speech length and frequency, while controlling for important personal characteristics that may also affect these variables. I estimate OLS regression equations for each of the dependent variables (average speech length and average speech frequency) and 10 independent variables. The equations include the following independent variables:

- Number of women in the House/Senate: The number of women in the chamber, calculated for each session
- Non-whiteness: non-white=1, white=0
- Party: Democrat=1, Republican=0
- Legislative experience: experience=1, no experience=0
- Governmental experience: experience=1, no experience=0
- Career in law: prior occupation law=1, prior occupation not law=0
- Life-long career in politics: life-long in politics=1, not life-long in politics=0
- Career in the military: prior occupation military=1, prior occupation not military=0

- Region: census south=1, not census south=0
- Seniority: years of service at the time of the speech, entered as numerical data

It is important to note that legislative experience includes all prior offices that involve legislating. These are: city/state council, state representative, state senator, mayor, governor, lieutenant governor, Congressional staff, and legislative consultant. Government experience includes all government positions that do not involve legislating. These are: attorney general, school board, campaign volunteer/worker, government appointed positions (might legislate, but not a designated legislator), county/state boards, community organizers/lobbyists, district attorney, justice of the peace, and party chairman. Neither legislative, nor governmental experience, include individuals without any political experience. Careers in law and military were the most common careers among the Congress members. Life-long career in politics showed itself frequently as well, and I define this as individuals who only ever worked in politics.

The effect of the number of women in the House and Senate on speech length and frequency is shown in Table 5.4. The increasing number of women in Congress only has a significant impact on men's average speech length and frequency in the Senate. The increasing number of female Senators has a positive effect on the number of words per speech and negative effect on the number of speeches per bill among men. Seniority has a highly significant positive impact on both men and women's speech length in the House and men's speech length and frequency in the Senate. Being a Democrat is a significant predictor for women's average speech length in the Senate. Non-white male members speak significantly fewer times per bill in the House and Senate than white men. Additionally, a career in law is a significant positive predictor



for women's average speech length in the House and men's average speech frequency in the Senate.

*The Effect of the Number of Women in the House and Senate on Men's and Women's Average Speech Length and Frequency (Table 5.4)*

	Average Speech Length in House (Men)	Average Speech Length in Senate (Men)	Average Speech Length in House (Women)	Average Speech Length in Senate (Women)	Average Speech Frequency in House (Men)	Average Speech Frequency in Senate (Men)	Average Speech Frequency in House (Women)	Average Speech Frequency in Senate (Women)
Number of Women in the House/ Senate	0.974 (0.95)	14.139 (2.10)*	-2.270 (1.56)	32.575 (1.13)	-0.001 (0.72)	-0.029 (1.99)*	0.001 (0.78)	-0.032 (1.41)
Non- Whiteness	41.152 (0.92)	-229.118 (1.00)	-21.364 (0.40)	572.393 (1.16)	-0.178 (4.41)**	-0.696 (2.69)**	0.035 (0.46)	-0.405 (1.19)
Party	-10.558 (0.29)	58.828 (0.82)	48.380 (0.81)	451.031 (2.49)*	-0.012 (0.24)	-0.143 (0.92)	-0.066 (1.26)	0.244 (0.63)
Legislative Experience	21.328 (0.39)	7.465 (0.08)	12.026 (0.18)	-140.857 (0.82)	-0.011 (0.20)	-0.320 (1.35)	0.074 (1.49)	-0.123 (0.39)
Government Experience, Not Legislative	-43.585 (0.77)	-139.338 (1.61)	-46.677 (0.65)	-99.389 (0.36)	0.032 (0.40)	-0.018 (0.06)	0.087 (1.37)	-0.230 (0.67)
Career in Law	4.216 (0.12)	-1.930 (0.02)	153.191 (2.39)*	-129.679 (0.45)	0.016 (0.31)	0.287 (2.09)*	-0.054 (1.02)	-0.121 (0.52)
Life Long Political Career	57.885 (0.55)	-19.365 (0.11)	21.591 (0.50)	-69.821 (0.27)	0.142 (1.23)	0.144 (0.28)	0.049 (0.57)	-0.440 (1.52)
Career in Military	-20.189 (0.39)	-162.316 (1.05)	-53.838 (1.29)		-0.078 (1.24)	0.150 (0.61)	0.043 (0.80)	
From the Census South	33.039 (0.63)	-126.296 (1.36)	127.917 (1.69)	-454.099 (1.72)	-0.043 (1.10)	-0.237 (1.62)	-0.053 (1.03)	-0.175 (0.51)
Seniority	4.137 (2.73)**	-0.649 (0.14)	14.679 (3.10)**	26.081 (1.90)	0.007 (2.58)*	0.025 (2.68)**	0.001 (0.22)	0.027 (0.85)
Constant	326.752 (3.78)**	786.455 (6.40)**	363.060 (3.34)**	218.782 (0.57)	0.395 (4.77)**	0.948 (3.20)**	0.270 (3.61)**	0.853 (2.45)*
$R^2$	0.02	0.03	0.21	0.21	0.03	0.05	0.03	0.07
$N$	642	463	161	50	642	463	161	50

\*  $p < 0.05$ ; \*\*  $p < 0.01$

Ordinary least squares regression with t-ratios in parentheses

From my analysis, it is clear that the increasing number of women in the Senate affects men's volubility. Male Senator's speeches increase in length and decrease in frequency as women enter Senate, which is exactly the opposite of hypothesis 2. Additionally, the longer male members have been in Congress, the more voluble they are. The only exception to this is with men's average speech length in the Senate. More senior women in the House also use more words per speech. It makes sense that members with greater seniority would have more confidence speaking on the floor because they have experience doing so. Additionally, they might be granted more time to speak than newer members. Democratic women have longer speeches than Republican women in the Senate, which might be due to the fact that there are more female Democrats than female Republicans, and therefore they have more confidence speaking.

It is interesting that being a racial minority significantly decreases the number of speeches men give per bill in both bodies. Whiteness appears to be important for the number of speeches Congressmen give. A career in law only has an impact on women's speech length in the House and men's speech frequency in the Senate. A larger percentage of women are lawyers in the House than in the Senate, and a larger percentage of men are lawyers in the Senate than in the House. It is possible that the larger number of lawyers in the sample in these bodies allowed for a significant impact to be shown.

All in all, my hypothesis was not supported by the data. The significance of the increase of women on men's volubility directly contradicted *hypothesis 2*. The increasing number of women did not significantly impact women's volubility, lending no support to hypothesis 1. It appears that seniority and race have a greater impact on volubility than the increasing number of women in Congress.

Not shown in my regression tables is the analysis of the significance of women's increase on volubility by policy area. This is due to the fact that the only instances in which the increasing number of women made a significant impact on volubility are among men's speech length and frequency. In two policy areas the number of women had a significant positive impact on men's speech length. In two policy areas the number of women had a significant negative impact on men's speech frequency. However, the increasing number of women did have a significant positive impact on men's speech frequency on bills concerning family, meaning that my hypothesis was partially supported. Over time, the average number of speeches men gave on family-related bills increased, while the speech frequency on foreign affairs bills decreased. Men become slightly more voluble on women's issues and less voluble on some hard-power issues. My analysis did not show any significant impacts of predictors on women's volubility across policy areas.

## **Gender and volubility in the House and Senate: Summary and Evaluation of the Results**

### *Hypothesis 1*

The inconsistent trends in women's speech length and frequency in the Senate do support my hypothesis, and in the House inconsistent trends contradict my hypothesis. Over the 20-year period there is an increase in speech length in the Senate. There is also an increasing trend in the Senate for average speech frequency, but there is a stark decrease in the 111<sup>th</sup> session that ends this trend. In the House there are inconsistent trends showing a decrease in average speech length and frequency. Therefore, as the number of women increase in Congress, there is an inconsistent increase in volubility in the Senate and a decrease in volubility in the House among women.

### *Hypothesis 2*

My hypothesis is not supported by the data on men's volubility. In the House and the Senate the average speech length among men follows the same trend. The average number of words men use per speech increases from the 102<sup>nd</sup> to the 108<sup>th</sup> session, and then slightly decreases in the 111<sup>th</sup> session, but remains higher than in the 102<sup>nd</sup> session, showing an increase over the 20-year period. The average speech frequency decreases from the 102<sup>nd</sup> to the 111<sup>th</sup> session, with inconsistencies between in the Senate. The average frequency in the House barely changes at all during the 20 years. Therefore, men's volubility in regards to speech length increases over time, but speech frequency decreases. This directly contradicts my hypothesis, which assumed the opposite. Men speak fewer times but for longer periods of time.

### *Hypothesis 3*

This hypothesis is only partially supported by inconsistent trends over time. In the Senate, women's speech length inconsistently increases over time on hard-power issues, but this increase also occurs for women's issues. In the House, women's speech length inconsistently increases on bills concerning the economy and decreases with bills on women's issues. The average speech frequency in the Senate decreases among women for bills concerning women's issues. There are no clear trends in the speech frequency of hard-power issues in the Senate. In the House, the average speech frequency follows no clear trends on hard-power issues and it only decreases on women's issues in the 111<sup>th</sup> session. Additionally in neither the House nor Senate does volubility end up at equal levels on the various policy issues. The differences in average speech length and frequency among the categories follow no consistent trends. Therefore, in the aggregate, volubility on women's issues increases, which contradicts my hypothesis. However,

women's volubility on hard-power issues also increases in the aggregate over time, which supports part of my hypothesis.

#### *Hypothesis 4*

My hypothesis is, again, partially supported by the data. In the Senate, men's average speech length increases for bills on women's issues, but there is no consistent decrease on hard-power issues. In the House, the average speech length for bills on women's issues inconsistently increases over time, and there is a slight drop across the 20-year period in the average speech length for hard-power issues. In the 111<sup>th</sup> session, the average speech length on women's issues is higher than for hard-power issues. In the 102<sup>nd</sup> session it was the opposite. This shows that in the aggregate men use more words for women's issues than hard-power issues over time.

Additionally, in the Senate men speak more times per bill on women's issues and fewer times per bill on hard-power issues over time. In the 111<sup>th</sup> session, speech frequency is higher on women's issues than hard-power issues among men. In the House, men speak more frequently on bills concerning women's issues until the 108<sup>th</sup> session, but the average is higher in the 111<sup>th</sup> than the 102<sup>nd</sup> and 105<sup>th</sup> sessions. There are no clear trends in men's speech frequency averages on hard-power issues in the House.

Therefore, despite inconsistencies, men's volubility increases in the aggregate for women's issues, which supports my hypothesis. The average volubility inconsistently decreases or does not change for hard-power issues.

### *Hypothesis 5*

My hypothesis is supported by the data on speech length, but not on speech frequency. On average speech length, women are more favored than men over time in the Senate and the gap decreases in the House. On average speech frequency, the gap inconsistently increases favorability for men in the Senate and does not change in the House. Therefore, the ratio of women's volubility to men's becomes more equal with speech length but not speech frequency.

### *Hypothesis 6*

The results of *Hypothesis 1* and *Hypothesis 2* were not as clear until my analysis for this hypothesis. In analyzing the significance of the effect of the increasing number of women on volubility, I found the lack of support for the two previous hypotheses was further confirmed. The contradiction in *hypothesis 2* is significant, wherein men use more words per bill, but speak fewer times across the sessions. The results of *hypothesis 1* are not significant. There are no trends of significance in the number of women in Congress having an impact on women's volubility. There is some evidence suggesting that men are more voluble on women's issues and less on hard-power issues over time, which supports my hypothesis. However there is no evidence supporting the hypothesis that the increasing number of women would affect women's volubility on certain policy areas.

### **Conclusion**

Until now, the main focus of scholarship on gendered volubility was not on Congress. Moreover, scholarship on gender differences in Congressional speeches lacked substantial analysis over time. While most of my hypotheses were not supported by the data, the results still

provide a greater understanding of how women affect Congressional behavior. I set out to analyze women's confidence in Congress and measured this confidence by volubility in this chapter. The increasing number of women in Congress does not affect women's confidence in speaking, but it does affect men's behavior in regards to speech. No scholar to date has assessed women's impact on the confidence of Congress members over time.

Pearson and Dancey (2011) studied women's speech frequency in the 103<sup>rd</sup> and 109<sup>th</sup> sessions in the House and found that women speak more frequently than men with both one-minute speeches and speeches on legislative debate. They chose these two sessions because different parties were in the majority and in each session the House comprised of a different number of women. Hypothesis 5 supports Pearson and Dancey's results. However, I go farther to show how women's higher levels of volubility change over time. In the House, the gap between men and women's volubility is the same at the start and end of the 20-year period that I studied, which supports these scholars' hypotheses over time. Additionally, I show that women's average speech frequency became increasingly higher than men's in the Senate. Average speech length evens out over time in the House, but increasingly favors women in the Senate, the body wherein volubility had not yet been studied. There are a limited number of women to study in the Senate, which could be the reason for the insignificance of the trends I found. Nonetheless, the trends I did find support and expand upon prior research.

Despite the limited number of bills in my sample, I was able to elaborate upon Katherine Cramer Walsh and Michele Swers' various studies on gendered differences in the discussion of various policy areas. Walsh (2002) studied one session of Congress by analyzing the perspectives women brought to significant bills. Swers (2012) also examined one session, examining how women crossed party lines and took positions on various issues. Both scholars

discussed how women bring new perspectives to legislation on women's issues. However, they did not analyze the patterns of women's behavior over time, nor did they specifically focus on volubility. Additionally, Swers' focus was on the Senate and Walsh's was on the House. My analysis on policy area does not necessarily support or contradict their findings, but rather shows that it might not be women in Congress who are affecting the behavior of members of Congress, which adds a new line of questioning to previous findings.

The trends I found in policy area are only significant among men in the Senate, but the insignificant trends in women's volubility reveal important information as well. Women remain voluble on women's issues, but also gain volubility on hard-power issues over time in the aggregate. Men however become more voluble on bills concerning women's issues and less on hard-power-related bills, which supports my hypothesis. While Swers (2012) shows that members speak more about women's issues with more women in the Senate, I reveal that members have more to say on bills that we might categorize under women's issues, and their volubility increases over time. Additionally, the impact of the increasing number of women in Congress is much more significant on men's behavior than women's behavior. This shows us that not only women's confidence is affected by women entering men's world of politics, but the men are changing their behavior as well.

Finally, my analysis goes far beyond any of these studies by examining trends over time. My research was constrained by the number of women in Congress and limited time, which impeded my ability to observe more bills. However, even with a smaller than ideal sample size, my regressions provided evidence of significant trends in the data. Over time women are inconsistently more voluble in the Senate and less in the House. Men's average speech frequency significantly decreases and average speech length significantly increases over time, which means



men become more voluble for each speech they give, but not necessarily for each bill. The increasing number of women in Congress does not only have a significant impact on men's volubility on certain policy areas, but also on men's general volubility. Men act differently as more women enter the room. Women, in the aggregate, become more voluble in the Senate.

Also important to note is the fact that seniority and race have significant impacts on the changes in volubility across the sessions in my sample. Thus, as women gain seniority, they will have greater significance on increasing volubility levels. Since women have only recently entered Congress in larger numbers, their average seniority is lower. As the number of women increases, we would expect the average seniority of women to increase as well. Moreover, there are a greater proportion of minorities among women than men in Congress, but being a minority only impacts male's volubility. Over time the number of racial minorities in Congress also increases, and therefore the significant negative impact of racial minority status among men played a role in men's decreasing volubility.

Additionally, certain aspects of my research could have resulted in errors in the results. First, the sample size is small. Second, significant legislation increases the likelihood that a member will speak on the bills, but it does not guarantee that all members speak. Therefore, not all Congressmen and women of each session are included in my sample. There could be outliers among the bills in regards to volubility, and due to the small sample size this would have an effect on the results. One last error could also be in the data collection methods. If for some reason Proquest failed to include speeches from certain bills, my results would be incorrect.

So what do the results mean? The more members are heard, the more influence they have over policy being passed. If women are speaking more over time, and men are speaking less, then the underrepresented group is gaining a larger voice. Therefore, they are able to have a

greater impact on policy. Additionally, debates on the floor are televised, which means that constituents are able to watch and listen. While some scholars and members of Congress claim that speeches on the floor do not make a difference in the passage of policy, these speeches are a way for individuals with less seniority to have their voices heard (Phillips 2015). Therefore, men, who have greater seniority than women, are speaking less on the floor over time. This could be due to the fact that they do not feel it necessary to appear on the floor. Women on the other hand might want to take any chance to have their voices heard. As women's volubility increases, constituents are better able to recognize who influences legislation. As men's volubility decreases, constituents are given the opportunity to observe women's impact on Congress.

Finally, particularly with the presidential election this past fall, women in politics came to the forefront as a discussion topic. Journalists employed much of the scholarship I also reviewed in order to question women's impact on politics. For example, Sarah Kliff of *Vox* wrote an article titled, "The research is clear: electing more women changes how government works". My research does not necessarily contradict this statement or the contents of the article, but it does qualify it in certain regards. Specifically, the increasing number of women elected to Congress impacts how men function within government. While the volubility of Congresswomen is not significantly affected by the number of women in Congress, Congressmen's volubility does significantly decrease over time. This suggests that the government run by men in the past is changing as men interact with more women in their work environment.

## **Chapter 6**

### **Gendered Politics from the Perspectives of Those Involved**

#### **Introduction**

The third major section of my analysis is a qualitative exploration of the perspectives of those with experience in legislative environments. Quantitative analysis provides evidence of the trends, and lack thereof, in sponsorship and volubility, but interviews offer a deeper understanding of how individuals in the system experience changes from within. In this chapter I discuss the interviews I conducted with legislators and their staff. After offering a more in depth explanation of my methods for interviewing than I did in Chapter 3, I delve into an account of issues I discussed with the subjects. These discussions afforded me the opportunity to better understand the outcomes of my quantitative analysis, which I explain at the end of this chapter.

#### **Interview Process and Subjects**

I interviewed seven individuals: five staffers and two legislators. While I planned to speak with more legislators, particularly members of Congress, it is unfortunately very difficult to secure interviews with politicians. The two legislators were Representatives from the Massachusetts General Court. I interviewed two staffers in the Massachusetts State House, two current staffers for a male US Senator, and one former staffer who worked for two different US Senators, one male and one female. For each interview I followed a similar set of questions, which varied based on whether the subject was a legislator or staffer. I diverged slightly from the set questions based on the flow of the interview and on the regional level of the legislator (state or national). That is, I sometimes asked follow-up questions if it seemed an individual had a lot to say on a specific topic. I also used the word “representative” instead of “Congressman or

woman” for state-level interviews. My questions can be found in the appendix. Only three of the seven interviews were performed in person, and therefore I decided not to digitally record any of the interviews for the sake of continuity. I wrote the transcripts as I conducted the interviews. Therefore, I collected few direct quotes. My main findings are condensed in the next section.

## **Main Findings**

The questions I asked in my interviews can be found in the appendix. My interviews did not strictly follow these questions. The course of discussion was based on the answers subjects provided. While the substance of my conversations with the interviewees varied based on their roles in the legislative process, there were five main themes that arose from the questions I posed. The following is a summary of ideas expressed during the interviews on issues about which the subjects had a great deal to say.

### *Seniority and Leadership Roles Matter*

Four of the seven interview subjects expressed the importance of leadership roles in the effectiveness of members in both the US and the Massachusetts legislature. The longer a member serves in Congress, the more opportunities they have to take on positions in leadership. Therefore, members in leadership positions are generally more senior members. Both Representatives and staffers claimed that House and Senate leadership control the bills brought to the floor. Particularly at the state level, the greatest challenge as a representative is passing laws, because to pass laws one must “win favor of the leadership” (Staffer for MA State Representative). The number of bills a member sponsors does not matter if that member is not in a position of leadership or is not well acquainted

with leaders in Congress. If a bill does not have support from leadership, it will not be brought to debate. Massachusetts Representative Elizabeth Poirier claims that this is why one learns not to “burn bridges” or “create enemies”. Effectiveness in sponsorship is about the relationships members make with senior members, or about their own seniority, not about their confidence in relation to the number of bills they sponsor, whether they are male or female.

At least at the state level, the speaker determines the course of action in the legislature. What the speaker finds important is what gets brought to the forefront. The staffer for a female MA Representative provided an anecdote to explain the power of House leadership. Last year, there were multiple bills surrounding issues within the LGBTQ community. Quite a few of these bills went far in committees. Leadership said to pick one to bring to the floor. A topic that was regarded as a minority issue became something with which there had to be a pick-and-choose game. The staffer said the same happens with what some consider women’s issues, although she thinks all issues are women’s issues when women bring a new perspective. This reveals that leadership has power. Considering the fact that the majority of leadership positions are occupied by men, in both US and state level politics, men have more power over the bills being brought to the floor and passed.

However, two interviewees gave me reason to believe that men recognize women’s voices need be heard at some level. John Sciamanna, a former staffer for US Senators Barbara Mikulski and Donald Riegle, said that Republicans often “elevate one female to leadership in the House.” This is similar to what Michel Swers (2013) describes when she claims that men bring women to the forefront on certain issues in order to show the public that they are not biased against women. Even if this is the case, it still places women in

leadership roles, creating space for their voices to be heard. Additionally, Representative Jay Kaufman of the MA General Assembly stated that no speaker “dares to not have women in positions of prominence.” That is, the men in power know that they have to at least act as though they respect women’s voices. Over time, as more women enter politics and gain seniority, I would expect their opportunities for leadership to expand. The lack of women’s voices and effectiveness in sponsorship and cosponsorship does not appear to be due purely to their status as a woman, but rather to the fact that women are newcomers in our legislatures in relation to men.

#### *Men’s Club: Perpetual Existence, Generational Aspects, and the Effect*

While my quantitative hypotheses do not focus on whether or not men still form exclusive cliques in Congress, the impact of such groups could affect women’s confidence. Therefore, I explored male association in my interviews. Various interview subjects had different perspectives on the issue. All subjects in state level politics claimed that the “old boys network” (Representative Elizabeth Poirier) still exists. Republican Representative Poirier explained that the legislature is a “fraternity of men,” who have, “the same language and same shared experiences.” They are able to better communicate among one another, and are more able and willing to listen to each other. Representative Kaufman, a man in the House about which Representative Poirier spoke, had similar thoughts. He claimed that within what might be called “locker-room talk,” there is still misogyny, though less now than in the 90s as more women enter the building. John Sciamanna, who has worked at the US level since the 90s, expressed a similar sentiment. Congress is an “exclusive

membership club,” and until you get “gender parity” the challenges that this “clubbiness” propagates will continue to exist (Sciamanna).

The continual strength of male alliance, even after recent increases in the number of women in legislatures, has the potential to greatly affect behavior in the institutions. If men are more willing to listen to men, then women are less likely to be heard. “Any non diverse group has tunnel vision,” and this is true of the US Congress (Sciamanna). Men are used to hearing men’s voices and perspectives, and therefore women are more harshly judged. They bring perspective that men do not provide, but Congress is still far from representing constituents (Representative Kaufman). Additionally, the men’s club mentality appears to have a greater effect behind the scenes than on the floor, which I unfortunately did not have the time to research. The staffer for the MA State Representative who wished to remain confidential said that “it is easy to be spoken over as a female staffer,” and everything must be “said loudly, clearly, perfectly.” Nicole Stephans, a staffer for Representative Kaufman, had a similar understanding of what it meant to be a female staffer. This then influences how decisions are made. Oftentimes communication between offices happens at the staff levels, and if female staffers are not being heard, it means their Representatives’ voices are being ignored.

However, two of my interview subjects provided hope for a potential dissolution of the men’s club mentality in Congress, which in turn means hope for greater female volubility behind closed doors. These two staffers for a male US Senator claimed that this attitude is very generational. Their boss is young, and a large proponent for what I refer to as women’s issues. Among his contemporaries and him, they have not witnessed what Sciamanna also said was becoming less prominent in Congress: a group of men, lacking

diversity, and therefore lacking perspective. If it is true that as the number of women in Congress increases men are becoming less fraternal, then women are having an impact on internal behavior, particularly on patterns of male confidence.

### *Questioning Cosponsorship*

Much of my research rests on cosponsorship levels and effectiveness. The more bills a member cosponsors, the more confident that member is. However, this idea was challenged in three of my interviews. The confidential staffers for the US Senator both said that cosponsorship is somewhat meaningless. They claimed that some members try to get their names on every bill, and others do not because they are against diluting what they stand for. This means that cosponsorship levels are not based on confidence, but rather the approach members want to take: their name on multiple bills or on bills that matter to them.

The staffer for the MA State Representative said that cosponsorship often happens at a staff level. Men dominate positions, at least at the state level, and that combined with the men's club causes women's voices to be heard less. Therefore, cosponsorship is influenced not only by the lack of female legislators voices, but also their female staff's voices. This means cosponsorship has less to do with confidence than I thought.

Finally, both Representative Poirier and the staffers for the US Senator claimed that cosponsorship and sponsorship are based on committees and personal interests. Members are on committees based on their interests. They then support legislation in those committees dependent on their experience with issues. Representative Poirier also discussed other factors that influence cosponsorship: colleagues you want to support,



friends on the other side of the aisle, and the region for which you serve. Cosponsorship levels appear to be based more on interests than confidence. Therefore, the increasing number of women in Congress might influence cosponsorship levels not because of increased confidence, but rather another factor having to do with how interests change as women enter Congress. That is, as more women enter Congress, there could be more sponsored bills in which women are interested, and therefore women look to cosponsor more legislation.

### *Women Working Together*

My overarching research question focuses on how the increasing number of women in Congress impacts the behavior of members of congress. Therefore, it is important to understand how individuals involved in the legislative process view the impact of women on women's behavior. Part of that is how women interact with one another. In my attempt to learn about my interview subjects' opinions on women's interactions, two distinct conditions arose. Sometimes it is difficult for women to work together, and other times there is more collegiality among women than men.

Representative Poirier said that there are two camps of women: those who try to act like the men and go over the top, or are too forceful with their ideas, and those who sit back and watch what works before acting to disrespect or degrade anyone. Women in both groups are part of the Massachusetts Women's Caucus, which is a place in which we see collegiality with women. They work together across the aisle. They are friendly with one another (Representative Poirier and Staffer for MA State Representative). However,

Representative Poirier also said that women are more competitive with one another, always “trying to one up” each other, and it is sometimes easier to get along with men.

Staffer Nicole Stephans described similar circumstances between female Representatives and their female staffers. Women sometimes have difficulty working with other women. When female representatives interact with their female staff, there appears to be the mentality of “you get through this because I got through this” (Stephans). If there is similar competition between women at the US level, then my hypotheses on the increasing number of women in Congress increasing confidence could both be supported and refuted. Collegiality and increased support among women could increase confidence. Competition could lead to a hostile environment, decreasing confidence or effectiveness.

Moreover, the staffers for the US Senator explained that it is individuals that matter, not gender. 100 women in the Senate would be a great scenario, but it is about having the right people in office, “people who can do a good job legislating” (Staffers for US Senator). The number of women in Congress appears to matter less to women in politics than I predicted.

### *Backlash*

The rates of sponsorship, cosponsorship, effectiveness, and volubility that I observed could all be results of backlash towards women. There is the possibility that a decrease in one of these dependent variables over time is due to women’s fear of backlash. Through the interviews I performed, I learned that backlash tends to be directed more towards individuals than a gender. None of the individuals I talked to said that they saw any form of clear backlash towards women. Representative Poirier stated that backlash is

towards individuals who do not learn to respect others, and this sometimes happens when women go overboard in their attempts to act like the men. John Sciamanna said he did not witness backlash when working as a staffer. Women bring new issues to the table, but they do not face backlash for their new perspective (Sciamanna). Moreover, the staffer for the MA State Representative said that most debate on legislation is done behind closed doors. Therefore members are prepared for what they will hear on the floor or see in votes, and backlash does not occur. If this no-backlash trend is occurring in the US Congress, then there must be another explanation for any decreasing trends in sponsorship, effectiveness, and volubility.

### **Conclusion: Meaning in Relation to Quantitative Data**

I am skeptical of generalizing in any way the findings from my interviews because I only had seven subjects, the majority from the MA State Legislature. However, there are some interesting themes that both help to understand my quantitative data and to support other scholars' work. The majority of scholarly interviews that have been conducted on gendered behavior in Congress focus on policy issues and the men's club attitude. Particularly, Michele Swers (2013) performs a series of interviews with Senators and their staff, wherein she delves into similar themes to those that arose in my interviews. However, my focus was how an increase in the number of women changes the internal behavior and effectiveness of the institution. I wanted to know if more women in the room meant women were more comfortable being a part of Congress.

Despite my intention for the interviews, the results came out much closer to Swers' than I hoped. Participants were more willing to discuss how the men's club mentality

affected gendered policy focus than how the number of women in the room influenced sponsorship and volubility. Supporting Swers' findings is of course beneficial, but I had expected different answers in that I was asking different questions. This outcome was perhaps due to legislators and their staffs' familiarity with questions similar to Swers', and they therefore assumed that I was asking the same of them. Additionally, my lack of experience in interviewing was a slight limitation. However, some of the answers did provide me with more information than what prior scholars have found, and therefore I am able to both expand on their work and to better understand my quantitative analysis.

Through regression analysis I had found that seniority was a significant predictor in legislative behavior. My interviews revealed that seniority matters because more senior members often have greater leadership roles. Leadership controls the issues and people that come to floor, and therefore both sponsorship and volubility are affected by seniority. However, women's average seniority is far lower than men's. As more women enter and remain in Congress, their average seniority will grow. This will lead to more leadership roles for women. However, leadership roles do not necessarily mean greater confidence. I found that over time women will gain power, but power does not mean confidence. Brescoll (2011) does explain that the more power an individual has, the more voluble they are. Therefore, as women gain seniority, they should become more voluble.

None of my quantitative analysis addressed whether or not Congress is still a men's club, but my interviews showed that both state and national level legislators are a network of men. However, this is changing over time, and younger male legislators are less entrenched in this attitude. Additionally, as more women enter Congress, women continue to work across the aisle, despite sometimes being competitive with one another. Swers

(2013) discusses the collegiality among women, and my research supports her findings. Additionally, I reveal through my interviews that over time this bipartisanship lasts, particularly on issues that women find important within women's caucuses. I also found that some women still attempt to take on men's attitudes. Therefore, it makes sense that there is not an increasing trend in the gap between women and men's speech length levels. That is, if women are following men's actions, then they might speak like men as well.

What quantitative analysis did not show me is that cosponsorship is dependent on member's attitudes towards cosponsorship. Perhaps this is why only a few scholars have studied gendered cosponsorship in Congress. I learned that there are members of the US Congress who try to get their names on every bill and there are those that believe in backing certain bills they truly support. Therefore, women's higher average cosponsorship levels mean that more women are perhaps in the group of individuals who get their names on each piece of legislation. This could mean that women are simply more willing to support more of their colleagues. It could also be a result of the fact that women are newer members, and in order to compensate for newness, they get their name out there through cosponsorship. However, an interviewee also claimed that staffers are often in charge of following their boss's instructions to get names on bills. Female staffers who are less voluble could also be a factor in cosponsorship levels. Though, the trends in effectiveness of cosponsorship are significantly affected by seniority. Based on the interview results on seniority, it could be that both more senior members and women like to have their names on more bills. More research must be done in order to better understand the increasing levels of cosponsorship among women.

My research also focused on how women affect women, and if increased female interactions in Congress would cause increased female confidence on the Congressional floor. Like Swers (2013) found in some of her interviews, I learned that the individual sometimes matters more than the gender. There are competitive women who are difficult to work with, and there are men who advocate for women's issues. This relates to the idea of critical actors from Childs and Krook (2009), who claim we cannot generalize all women as the reason for changes in Congressional behavior. Differences in the way women behave over time, particularly in regards to volubility, cannot be fully explained by the number of women in the room. My interview subjects ignored the question of how women affect men's behavior, or they claimed that there is no clear difference. This is important to note because my analysis shows that men's behavior does change as women enter Congress. I have not yet found scholarly literature on Congressmen's changing behavior, aside from creating backlash. Therefore, it appears that both scholars and legislators are focused more on how women affect women than how women affect men. In this respect, my research shines a new light in this field.

Finally, based on my interviews it appears that backlash is no longer occurring in legislatures. Brescoll (2011) and Swers (2013) both discuss the idea of backlash. Women might speak less because they fear backlash from speaking or legislating too much. Additionally, when deals are done behind closed doors, it appears as though backlash is less likely because nobody is surprised by the outcomes. Men and women have discussed their positions and nobody plans on reacting to anyone in public. Therefore, backlash might have disappeared on the Congressional floor, though I would need to speak with more individuals at the US Congressional level to truly know if this is the case. If this were to be

supported by future scholars, then the decreases that I observe in my independent variables are in no way due to the fact that women fear backlash.

From my interviews, we gain a different perspective on my quantitative analysis. Additionally, my discussions with individuals involved in the legislative process expanded findings from prior research and interviews with members of Congress. While none of my quantitative results are conclusive, these interviews provide possible reasoning for the inconsistent trends observed. The increasing number of women in Congress is not the main factor in sponsorship, cosponsorship, effectiveness, or volubility levels, but there are distinct aspects of behavior in Congress that women affect, and these interviews strengthen our grasp on understanding this behavior.

## **Chapter 7**

### **Closing Thoughts: Women's Impact on Congressional Behavior and the Future of my Research**

#### **Introduction**

My study expands our understanding of how Congresswomen affect the behavior of members within the US Congress. While limitations of time weighed heavily on my data collection, the results of my analysis reveal significant trends that provide us with information on legislators' behavioral patterns. There is a large amount of scholarly literature on women's effectiveness in Congress and gendered volubility, but no scholars had yet studied gendered effectiveness and volubility over time as the number of women in Congress increases. I bring together research on gendered deliberation, effectiveness, and volubility in order to analyze women's effect on the changing behavior and confidence levels in Congress over time.

In this chapter, I discuss the significant trends I found in sponsorship and volubility. Moreover, I explain how my interviews offered an additional perspective on the results of my quantitative data. Then I examine the importance of my study's results in forming our perception of women in Congress. Finally, I consider a path for future study of these themes.

#### **Important Findings**

##### *Sponsorship, Cosponsorship, Effectiveness*

I analyzed the sponsorship and cosponsorship levels of 190 Congressmen and 190 Congresswomen in five sessions across the past 25 years, in addition to data I collected on the members' personal characteristics. To my knowledge, I provide the most comprehensive examination of gendered sponsorship, cosponsorship and effectiveness levels to date. Through



my analysis I found that most of my hypotheses were not confirmed. However, the results still delivered evidence to expand our understanding of Congresswomen's effect on the introduction and passage of legislation. My goal was to analyze confidence by testing levels of sponsorship and cosponsorship, as well as the impact of confidence on effectiveness.

Women's levels of sponsorship and cosponsorship in both the House and Senate increase at a faster rate than men's. That is, across the sessions in my sample, women introduce increasingly more legislation than men, though women's levels are not consistently increasing. Women get their names on more bills than men over time, mostly due to men's decreasing rates of introducing bills. Men's cosponsorship levels increase in the House over time, but decrease in the Senate. Men's sponsorship levels decrease in the House and Senate across the sessions. Therefore, men's levels of legislation introduction decrease in the aggregate over time. Nevertheless, the increasing number of women in Congress is not a significant predictor of the changing rates of women or men's sponsorship and cosponsorship levels over time. Women do not affect women's increasing confidence.

In the aggregate women are increasingly more effective than men in sponsorship and cosponsorship in the Senate. However, they are not more effective in the House. Neither women's nor men's effectiveness increases consistently over time in either the House or Senate. Most importantly, the only significant impact of the increase of women in Congress over time is on the effectiveness of women's cosponsorship in the House. As the number of women in Congress increases, women become significantly less effective at passing bills they cosponsor.

Seniority is the most significant predictor of men and women's sponsorship and cosponsorship levels over time. In the House, male and female members who have been in Congress longer sponsor significantly more legislation. Men with greater seniority in the Senate

cosponsor significantly fewer bills than men who have been in Congress a shorter period of time. However, this is one of the only negative trends for increased seniority. Seniority is an insignificant positive predictor in multiple instances of sponsorship and cosponsorship. Seniority is also a significant predictor in effectiveness. Men and women in the House with greater seniority are more effective at sponsorship and cosponsorship, and more senior men in the Senate are more effective as well. It is important to remember that in my data set women have substantially lower seniority than men. However, as more women enter Congress and present women members gain seniority, my results suggest that both their sponsorship levels and effectiveness should increase as well.

Another interesting trend is in the negative impact of a career in politics and legislative experience on sponsorship and cosponsorship levels for men. One would expect that more experience would lead to more confidence, yet that is not the observed trend. However, where more legislative experience leads to significantly lower sponsorship and cosponsorship levels, it also brings about significantly increased effectiveness. That is, men with more experience introduce less legislation than those with less experience, but they are more effective in the passage of the legislation they do introduce.

The results reveal that women are more confident than men over time in sponsorship and cosponsorship, but they are not necessarily more effective as more women enter Congress. Therefore, women are more willing to introduce legislation with more women in the congressional body, even if the increase in the number of women does not have an impact on the legislation that is eventually passed.

### *Volubility: Speech Length and Frequency*

I analyzed the volubility, or speech length and frequency, of 643 members of Congress across 20 years in order to determine if the increasing number of women in Congress affected men and women's confidence on the Congressional floor. Based on the scholarship I have read, I believe this is also the most comprehensive study on gendered volubility in Congress. The majority of my hypotheses were not supported by the data. Nonetheless, there is still a wealth of information that my analysis provides that furthers our understanding of gendered volubility.

As the number of women in Congress increases, in the aggregate women's volubility increases in the Senate and decreases in the House. That is, in the Senate women speak longer and more frequently over time, and in the House they speak shorter and less frequently over time. Men's volubility in the House and Senate is split between length and frequency. That is, in both bodies, over time men use more words per speech and speak fewer times per bill. When we observe volubility by policy area, in the aggregate women speak more frequently and for longer periods of time on both women's issues and hard-power issues, and men speak more frequently and for longer periods of time on women's issues, but there are no consistent trends among men for hard-power issues. Moreover, the ratio of women's speech length to men's over time becomes more equal, but speech frequency does not. Through regression analysis I found that women have no significant impact on women's volubility in general or in certain policy areas. Men do use significantly more words per bill and speak fewer times per session as the number of women in Congress increases.

Again, seniority plays a more significant role than the increasing number of women in Congress. Among both men and women's speech length in the House, and men's frequency in the House and Senate, seniority is a significant positive predictor. Additionally, non-whiteness is

a significant negative predictor for men's speech frequency in both bodies. The number of women in Congress only has a significant impact on men's volubility in the Senate.

My analysis suggests that women are more voluble in the aggregate over time. Individual men are more voluble when they speak, but men speak fewer times on each issue across the sessions. Men use their volubility differently over time. Therefore, women's voices are heard more and men change the way they deliver speeches. The increasing number of women in Congress only significantly impacts these trends for men in the Senate, but something is causing women to take up more space with their voices.

*Interviews: Seniority, Men's Club, Cosponsorship, Women Together, and Backlash*

While my interviews were by no means conclusive, they provided an interesting supplement to the quantitative data. I only performed seven interviews, and none were with members of the United States Congress. I did interview State Representatives, state staffers, and US Congressional staffers. These individuals involved in the legislative process discussed themes that not only supported and gave reason to my results, but also expanded upon prior scholars' work with Congressional interviews. The five major themes that arose in my interviews, despite the direction in which I had aimed to move, were: seniority, the perpetuation of the men's club, the meaninglessness of cosponsorship, women working with women, and backlash towards women.

Members in more senior positions often gain leadership roles, and the leadership controls both bills brought to Congress and who speaks on the Congressional floor. Therefore, the more senior women are, the more power they have, which could lead to greater confidence. This matches results of the significance of seniority on sponsorship and volubility in my regression

analysis. Moreover, from my interviews I learned that brotherly community still exists among men, but is slowly changing with the younger generations. This means that as more women enter Congress, men's behavior is changing, which could affect women's confidence levels. However, interviews revealed that my analysis of cosponsorship might be faulty. Oftentimes members will simply attach their names to as many bills as possible, using staff to do so. My quantitative data might not show increased confidence in cosponsorship, but it does show that women might be more willing to take this approach. Also, my data was somewhat undermined by what my interviewees said about women affecting women. While women do work together across they aisle, they are also individuals, just as men are. Sometimes the individual affects behavior in Congress more than a gender group might. Finally, my interview subjects claimed that backlash is not a problem in the legislative environment, which would mean that the decreasing trends I observe in sponsorship, cosponsorship, effectiveness, and volubility are not due to women's fear of male backlash.

The results of my interviews provide multiple explanations for the trends found in my data. While subjects held different opinions on the themes discussed, they all revealed that women cause changes in Congress over time. Some claimed that women become more competitive over time, and others stated that many women make an attempt at following men's example. Additionally, there was evidence that legislatures may become less male-centric. Whatever trends occur, the increasing number of women in Congress has an impact on the way in which members of Congress behave. Part of that behavior appears to be confidence and how members interact with others in their legislative bodies.

## **Importance of Quantitative and Qualitative Analysis**

To my knowledge, no scholar has yet performed such a comprehensive study on gendered Congressional behavior over time. My combination of quantitative and qualitative research provides observable trends across a 25-year period and anecdotal evidence that suggests the reasons for some of those trends. In Chapter 2, I discussed literature on women's issues and legislative behavior, the concept of critical mass, and deliberative environments. Here I explain how my research contributes to each of those fields and why my results are so important to future research.

### *Policy Focus: Women's Issues and Legislative Behavior*

Prior scholarship examines women's policy focus, effectiveness through small-scale analysis, and role as men's tools. My regression analysis reveals that women are more voluble on women's issues over time, but they also become more voluble on hard-power issues. Women's volubility increases across all policy issues in the aggregate, and women are not consistently more likely to discuss women's issues than foreign affairs, economy or government issues. While I did not analyze sponsorship by policy area, my findings on volubility show that even if women were to support more legislation on women's issues than other issues, they would not necessarily discuss that legislation more. That is, women might be quick to say they support something, but when it comes down to showing the public their focus on the Congressional floor, multiple policy categories get the same amount of attention as women's issues. Through my interviews I also learned that the issues members discuss are based on committees, and committees are based on interests. Women are not only interested in women's issues, and some men are advocates for women's issues.

Additionally, I analyzed effectiveness in a similar way to other scholars, particularly Jeydel and Taylor. The average effectiveness level was the ratio of the total number of bills passed to the total sponsored or cosponsored. However, past studies only examined two sessions, and analyzed the data together, rather than over time. I analyzed my data session by session across a 25-year period, which allowed me to examine changes in effectiveness over time. I not only examined effectiveness, but the levels of sponsorship and cosponsorship in order to determine trends in those levels as more women entered Congress. Prior scholarly literature often claims that women are more effective than men, but when we examine the trends over time, this is not consistently true. There are sessions in which women are more effective than men, and there are sessions in which men are more effective than women. However, overall seniority has a greater impact on effectiveness than gender, and therefore as Congresswomen gain seniority, they should become more effective. My interviews also support the idea that more senior members are more effective.

Finally under this area of scholarship is the idea that women are men's tools. One of my interviews with a former Senate staffer supported this. He claimed that sometimes Republican Congressmen bring a Republican Congresswoman to the forefront on a bill. Michele Swers (2013) writes that this is because Republican men do not want to seem biased. In my review of prior scholarship, I made an early hypothesis that the increasing number of women in Congress creates barriers to women being used as tools because women's own levels of sponsorship will rise. That is, they are not only signing on as cosponsors. While neither men nor women's sponsorship or cosponsorship levels consistently increase over time, women do increasingly sponsor and cosponsor more than men over time. Therefore, women are proposing their own

legislation more than men are, which means women are probably not being used as tools as consistently as they were in the past.

### *The Question of Critical Mass*

Scholars on the concept of critical mass frequently debate whether or not a critical mass of minority members will significantly alter institutional norms (Kanter 1977). Other scholars claim that critical actors can change behavioral structures as individuals (Childs and Krook 2009). My research questions whether or not the increasing number of women has significantly altered the way Congress behaves. Based on my interviews, it appears as though women might be beginning to change norms, such as the men's club mentality, but changes could be due to other factors as well. My analysis reveals that in certain situations it is the number of women in Congress that significantly influences my independent variables of interest. While I have not changed how we understand critical mass, I offer support for the theory, in that the increasing size of a minority group in Congress is changing the deliberative environment. However, it is important to note that my analysis does not provide evidence to support the idea that there is a uniform threshold effect with women in Congress, as Kanter (1977) suggested might exist.

### *Deliberative Environments*

Prior scholars have addressed power dynamics and volubility when researching deliberative environments, but none have comprehensively studied volubility in the US Congress over time. As power changes, volubility will change. Gendered norms in power dynamics should lead us to believe that the more an individual speaks, the more power they have, and since men speak more, they have more power (Brescoll 2011). However, in testing volubility in Congress, I



have evidence revealing that men's power might be decreasing. Men's volubility is not greater than women's as it was 25 years ago. The gap between men and women's volubility levels is decreasing, and women's levels actually surpassed men's in the House and Senate when it comes to speech length. Therefore, with changes in volubility, we can assume that there will also be changes in the power structures in Congress. If women are speaking more, they are gaining influence on the issues.

Additionally, if men are speaking more about women's issues, and the number of women in the room is a predictor of this trend, we can conclude that women are influencing men's policy focus. Katherine Cramer Walsh (2002) explained how women bring new issues to the table. However, Walsh only focused on one specific session of Congress, which limited her study. I show that over time the number of women in the room is having an impact on men's issue focus.

As discussed in Chapter 2, some scholars believe that women will face backlash if they speak more (Brescoll 2011). There are some decreases between the increases in sponsorship, cosponsorship, effectiveness, and volubility that I observe among women. While in my interviews I learned that much deliberation goes on behind closed doors and not on the Congressional floor, I am curious to know if backlash is part of the reason for these dips in trends. More analysis would be required to test that idea.

### **The Future of My Research**

Throughout the process of data collection and analysis, I could not help but wonder if the reason no scholar had yet done a similar study to my own was that it was so time intensive and would require more than one year to gain generalizable results. I still question the conclusiveness of my study and wish that I had more time for data collection of a larger sample size. Despite the

limitations, I have completed one of the most far-reaching analyses on gendered Congressional behavior to date. However, there is still a long way to go when it comes to research on gendered political behavior. I hope that my research has added to the field, and that other scholars can question my analyses through further research.

## **Conclusion**

My main question in this study was: how does the increasing number of women in Congress over the past 25 years affect Congressional behavior? I sought to understand how the number of women in the room could affect women and men's confidence, and how that confidence brought about changes in sponsorship, cosponsorship, effectiveness, and volubility. No other scholar had yet examined gendered behavior in Congress as comprehensively over time. Through my analysis, it is clear that Congress changes as women enter the institution, but the direct effect of the increase of women on the institution is only significant in certain instances. Contrary to some inferences in the literature, my study over time suggests that women are not consistently more effective than men (Kliff 2016). Seniority is where power lies in Congress, but as women increase in numbers in Congress, their average seniority increases too. Additionally, whatever factors might be influencing the change, women become more voluble than men over time, and that leads to an increase in women's power. With rising seniority and influence, women can change Congress. Women are infiltrating the men's club and altering the norms of the United States legislature.

## *Bibliography*

- Anzia, S. F., & Berry, C. R. (2011). The Jackie (and Jill) Robinson Effect: Why Do Congresswomen Outperform Congressmen? *American Journal of Political Science*, 55(3), 478–493.  
<https://doi.org/10.1111/j.1540-5907.2011.00512.x>
- Bratton, K. A. (2005). Critical mass theory revisited: The behavior and success of token women in state legislatures. *Politics & Gender*, 1(01), 97-125.
- Brescoll, V. L. (2011). Who takes the floor and why: Gender, power, and volubility in organizations. *Administrative Science Quarterly*, 56(4), 622-641.
- Childs, S., & Krook, M. L. (2009). Analysing Women's Substantive Representation: From Critical Mass to Critical Actors. *Government and Opposition*, 44(2), 125–145.  
<https://doi.org/10.1111/j.1477-7053.2009.01279.x>
- Congress.gov | Library of Congress. (n.d.). [legislation]. Retrieved November 14, 2016, from <https://www.congress.gov/>
- Congressional Biographical Directory (CLERKWEB). (n.d.). Retrieved November 14, 2016, from <http://bioguide.congress.gov/biosearch/biosearch.asp>
- Congressional Publications - Basic Search. (n.d.). Retrieved November 14, 2016, from <http://congressional.proquest.com/profiles/gis/search/basic/basicsearch>
- Frederick, B. (2011). Gender turnover and roll call voting in the US Senate. *Journal of Women, Politics & Policy*, 32(3), 193-210.
- Grey, S. (2006a). Numbers and Beyond: The Relevance of Critical Mass in Gender Research. *Politics & Gender*, null(04), 492–502. <https://doi.org/10.1017/S1743923X06221147>
- Griffin, J. D., Newman, B., & Wolbrecht, C. (2012). A gender gap in policy representation in the US Congress?. *Legislative Studies Quarterly*, 37(1), 35-66.
- Jeydel, A., & Taylor, A. J. (2003). Are Women Legislators Less Effective? Evidence from the U.S. House in the 103rd-105th Congress. *Political Research Quarterly*, 56(1), 19–27.  
<https://doi.org/10.2307/3219880>
- Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American journal of Sociology*, 82(5), 965-990.
- Karpowitz, C. F., Mendelberg, T., & Shaker, L. (2012). Gender inequality in deliberative participation. *American Political Science Review*, 106(03), 533-547.

- Kathlene, L. (1994). Power and Influence in State Legislative Policymaking: The Interaction of Gender and Position in Committee Hearing Debates. *The American Political Science Review*, 88(3), 560–576. <https://doi.org/10.2307/2944795>
- Kliff, S. (2016, July 27). The research is clear: electing more women changes how government works. Retrieved October 30, 2016, from <http://www.vox.com/2016/7/27/12266378/electing-women-congress-hillary-clinton>
- Lloren, A. (2014, October). Women's Substantive Representation: Defending Feminist Interests or Women's Electoral Preferences?. *The Journal of Legislative Studies* 21, no.2: doi.10.1080/13572334.2014.966643
- Pearson, K., & Dancey, L. (2011). Elevating Women's Voices in Congress: Speech Participation in the House of Representatives. *Political Research Quarterly*, 64(4), 910–923.
- Swers, M. L. (2013). *Women in the Club: Gender and Policy Making in the Senate*. University of Chicago Press.
- Stathis, S. W. (2014). *Landmark Legislation 1774-2012 : Major U.S. Acts and Treaties*. Washington, DC: CQ Press.
- The increasing uselessness of speaking on the House or Senate floor. (n.d.). Retrieved March 23, 2017, from <https://www.washingtonpost.com/news/the-fix/wp/2015/12/30/the-increasing-uselessness-of-speaking-on-the-house-floor/>
- The Women on Top Theory. (n.d.). Retrieved from <https://foreignpolicy.com/2016/07/25/the-glass-cliff-women-better-leaders-in-crisis-theresa-may-hillary-clinton-theresa-may-social-science/>
- Walsh, K. C. (2002). *Women Transforming Congress*. University of Oklahoma Press.
- Wängnerud, L. (2009). Women in Parliaments: Descriptive and Substantive Representation. *Annual Review of Political Science*, 12(1), 51–69. <https://doi.org/10.1146/annurev.polisci.11.053106.123839>
- Women Representatives and Senators by Congress, 1917–Present | US House of Representatives: History, Art & Archives. (n.d.). Retrieved September 15, 2016, from <http://history.house.gov/Exhibitions-and-Publications/WIC/Historical-Data/Women-Representatives-and-Senators-by-Congress/>

## *Appendix*

### **Interview Questions**

Warm Up Question 1: Could you tell me a little about how you got involved in politics?

Warm Up Question 2: What are your greatest challenges as a Congressman/woman?

#### *Long-serving Female Legislator*

- 1) Do you think there are specific expectations placed on women in congress that are not placed on your male colleagues?
- 2) Do you believe there are any major differences between the way that women members approach their work and the way the men approach theirs?
  - i. Do you think this is changing? That is, as more and more women enter congress, have expectations and actions changed as well?
  - ii. Have you noticed specific changes?
- 3) Aside from expectations, do you face particular obstacles because of gender?
- 4) Do you believe that having more women in Congress has changed the way Congress works?
  - i. How would you describe those changes?
  - ii. As more women enter Congress, how do you feel as a female member when you go to speak on the floor?
  - iii. When you walk onto the floor, how does your gender affect the way you speak, if it does at all? In other words, are you thinking about your gender when you discuss legislation?
- 5) Do you think the women who were elected in years past motivated more women to seek election?
  - i. Do you yourself try to recruit more women candidates?
- 6) What do you think can be done to increase the number of women in Congress, or do you even believe there needs to be more women in Congress?
- 7) Have you noticed any differences in the way men discuss legislation over time as more women enter Congress?
- 8) Some studies show that women sponsor more legislation than men in Congress, proportional to their size. Why do you think this might be the case?
- 9) When you look for cosponsors on legislation you want to propose, who do you begin reaching out to?
  - i. Does bipartisanship come before or in tandem with gender when seeking cosponsors?
- 10) Do you believe women or men are better at getting certain issues to the floor in Congress?
  - i. What are these issues?
  - ii. Why do you think this might be the case?

*Long-serving Male Legislator*

- 1) Do you think there are specific expectations placed on women in congress that are not placed on you and your male colleagues?
- 2) Do you believe there are any major differences between the way that women members approach their work and the way the men approach theirs?
  - i. Do you think this is changing? That is, as more and more women enter congress, have expectations and actions changed as well?
  - ii. Have you noticed specific changes?
- 3) Aside from expectations, do you believe female members face particular obstacles because of gender?
- 4) Do you believe that having more women in Congress the changed the way Congress works?
  - i. How would you describe those changes?
  - ii. As more women enter Congress, how do you feel as a male member when you go to speak on the floor?
  - iii. When you walk onto the floor, how does your gender affect the way you speak, if it does at all? In other words, are you thinking about your gender when you discuss legislation?
- 5) Do you think the women who were elected in years past motivated more women to seek election?
- 6) What do you think can be done to increase the number of women in Congress, or do you even believe there needs to be more women in Congress?
- 7) Have you noticed any differences in the way men discuss legislation over time as more women enter Congress?
- 8) Some studies show that women sponsor more legislation than men in Congress, proportional to their size. Why do you think this might be the case?
- 9) When you look for cosponsors on legislation you want to propose, who do you begin reaching out to?
  - i. Does bipartisanship come before or in tandem with gender when seeking cosponsors? How do you believe women go about looking for cosponsors?
- 10) Do you believe women or men are better at getting certain issues to the floor in Congress?
  - i. What are these issues?
  - ii. Why do you think this might be the case?

*Fairly New Female Legislator*

- 1) Do you think there are specific expectations placed on women in congress that are not placed on your male colleagues?
- 2) Do you believe there are any major differences between the way that women members approach their work and the way the men approach theirs?
  - i. Have you noticed specific changes in your time in Congress?
- 3) Aside from expectations, do you face particular obstacles because of gender?
- 4) Do you believe that having more women in Congress the changed the way Congress works?
  - i. How would you describe those changes?
  - ii. When you walk onto the floor, how does your gender affect the way you speak, if it does at all? In other words, are you thinking about your gender when you discuss legislation?
- 5) Do you think the women who were elected in years past motivated more women to seek election?
  - i. Were you yourself recruited by or influence by the recent increases of women candidates?
- 6) What do you think can be done to increase the number of women in Congress, or do you even believe there needs to be more women in Congress?
- 7) Some studies show that women sponsor more legislation than men in Congress, proportional to their size. Why do you think this might be the case?
- 8) When you look for cosponsors on legislation you want to propose, who do you begin reaching out to?
  - i. Does bipartisanship come before or in tandem with gender when seeking cosponsors?
- 9) Do you believe women or men are better at getting certain issues to the floor in Congress?
  - i. What are these issues?
  - ii. Why do you think this might be the case?

*Fairly New Male Legislator*

- 1) Do you think there are specific expectations placed on women in congress that are not placed on you and your male colleagues?
- 2) Do you believe there are any major differences between the way that women members approach their work and the way the men approach theirs?
  - i. Have you noticed specific changes in your time in Congress?
- 3) Aside from expectations, do you think women face particular obstacles because of gender?
- 4) Do you believe that having more women in Congress has changed the way Congress works?
  - i. How would you describe those changes?
  - ii. When you walk onto the floor, how does your gender affect the way you speak, if it does at all? In other words, are you thinking about your gender when you discuss legislation?
- 5) Do you think the women who were elected in years past motivated more women to seek election?
  - i. Were you at all influenced or discouraged by the increases of women candidates?
- 6) What do you think can be done to increase the number of women in Congress, or do you even believe there needs to be more women in Congress?
- 7) Some studies show that women sponsor more legislation than men in Congress, proportional to their size. Why do you think this might be the case?
- 8) When you look for cosponsors on legislation you want to propose, who do you begin reaching out to?
  - i. Does bipartisanship come before or in tandem with gender when seeking cosponsors?  
How do you believe women go about looking for cosponsors?
- 10) Do you believe women or men are better at getting certain issues to the floor in Congress?
  - i. What are these issues?
  - ii. Why do you think this might be the case?



*Staff*

- 1) Do you think there are specific expectations placed on women in congress that are not placed on their male colleagues?
- 2) Do you believe there are any major differences between the way that women members approach their work and the way the men approach theirs?
  - i. Have you noticed specific changes in your time working for X (x = member of Congress)?
- 3) Aside from expectations, do you think women face particular obstacles because of gender?
- 4) Do you believe that having more women in Congress has changed the way your Congressman/woman works?
  - i. How would you describe those changes?
- 5) What do you think can be done to increase the number of women in Congress, or do you even believe there needs to be more women in Congress?
- 6) Some studies show that women sponsor more legislation than men in Congress, proportional to their size. Why do you think this might be the case?
- 7) When your Congressman/woman looks for cosponsors on legislation you want to propose, who do you they begin reaching out to?
  - i. Does bipartisanship come before or in tandem with gender when seeking cosponsors?
- 8) Do you believe men or women are better at getting certain issues to the floor in Congress?
  - i. What are these issues?
  - ii. Why do you think this might be the case? <sup>7</sup>

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<sup>7</sup> Additionally, asked follow up questions not explicitly listed here. For the most part I stuck to these questions, or cut out some of these questions.

## **Policy Category Breakdown**

### *Foreign Affairs*

International Affairs  
Armed Forces and National Security  
Foreign Trade and International Finance  
Immigration

### *Environment*

Public Lands and Natural Resources  
Environmental Protection  
Energy  
Agriculture and Food  
Animals  
Water Resources Development

### *Family*

Education  
Health  
Housing and Community Development  
Families

### *Economy*

Taxation  
Transportation and Public Works  
Labor and Employment  
Social Welfare  
Commerce  
Finance and Financial Sector  
Economics and Public Finance

### *Government and Laws*

Government Operations and Politics  
Crime and Law Enforcement  
Civil Rights and Liberties, Minority Issues  
Congress  
Law

### *Miscellaneous (I did not sample from this category)*

Science, Technology, Communications  
Emergency Management  
Arts, Culture, Religion  
Native Americans  
Sports and Recreation  
Social Sciences and History