

Do increased numbers of female state legislators have a
tangible impact on abortion policy?

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Abstract

This research assesses the extent to which increasingly descriptive representation for women translates into substantive policy outcomes on abortion policy in state legislatures. By comparing the number of women and the percentage of women in state legislative bodies to the number of anti-abortion bills introduced in 2011, this project seeks to identify whether there is a relationship between the mere presence of women and fewer anti-abortion bills. The findings indicate that on the macro level, even when controlling for certain state level variables, state legislatures with a proportion of women above the mean introduce fewer abortion bills. When the results are broken down to upper and lower chambers by party, the results are only statistically significant in Democratically controlled upper chambers. The findings of this study have implications for understanding the relationship between descriptive and substantive representation, as well as the concept of critical mass.

Introduction

Society has long pondered the future of gender equality, both in its relative existence and long-term feasibility. Public opinion has largely accepted the fact that the status of women has been steadily improving over the course of the 20th and 21st centuries. Yet, women's representation in American government has remained curiously low. Even in 2012, women comprised only 23.7% of members of state legislatures around the country (Center for American Women and Politics 2013). The state with the largest percentage of women, Colorado, had 40%, and only seven other states' legislatures were comprised of more than 30% women (Center for American Women and Politics 2013).

Prominent analysts have contemplated this discrepancy, both in academic circles and the media. Some have found that women in elected office are better advocates for women's interests than are men, and that women in legislative bodies with higher percentages of other women are even more effective in advancing women's interests (Thomas 1991).

In an article that gained serious traction on Twitter and in the news media, Anne-Marie Slaughter asserted that:

The best hope for improving the lot of all women, and for closing what Wolfers and Stevenson call a 'new gender gap' — measured by well-being rather than wages — is to close the leadership gap: to elect a woman president and 50 women senators; to ensure that women are equally represented in the ranks of corporate executives and judicial leaders. Only when women wield power in sufficient numbers will we create a society that genuinely works for all women. That will be a society that works for everyone (Slaughter 2012).

On its face, this statement seems logically plausible and appears to be widely accepted as a goal among feminists and organizations dedicated to women's rights. Groups like the Center for American Women and Politics at Rutgers, The State University of New Jersey, the Women and Politics Institute at American University and the WCF Foundation, have an expressed interest in

increasing women's representation in political leadership positions; a goal that they have worked toward through extensive research on women's political representation in the United States in the last century. Emily's List is a political action committee dedicated to getting Democratic, pro-choice women elected to public office; The Wish List endorses pro-choice Republican women for office; and the Susan B. Anthony List is a pro-life PAC that supports pro-life women for public office. It's clear, then, that there is not a lack of interest in getting women into positions of elected office. The question, rather, is whether or not this is the most effective strategy to achieve women's policy aims.

In the wake of some seemingly strong evidence to suggest that more women does not equal enhanced success for women's interests, this research attempts to further address that very question. In 1973, the year of the Supreme Court's *Roe v. Wade* decision, women made up just 5.6% of state legislatures (Center for American Women and Politics 2013). Despite the significant gains women have made in representation in state legislatures since then, 2011 saw a record number of anti-abortion bills passed, and hundreds more introduced. Legislation included bills limiting who could perform an abortion, who could get an abortion and what kind of permission is required to obtain one. Despite the historic *Roe v. Wade* decision's long-since having legalized abortion as an individual woman's private right, some states have gone so far as to attempt to label fetuses as full-fledged persons entitled to the individual rights set forth in the constitution, and rendering abortion as murder.

Evidently, the overall increase women representatives was not sufficient to prevent the onslaught of bills that challenge women's right to abortion. Yet, varying numbers of women in state legislatures across the country offer ample opportunity to investigate the extent to which the presence of women in elective bodies can impact the bodies' treatment of issues that directly

affect women — issues such as abortion. In other words, does the mere presence of women in state legislatures have direct policy effects, at least in terms of abortion?

Digging a little bit deeper, the heftier question is whether or not increased descriptive representation of women in state legislatures has substantive policy implications. This is a critical question for anyone — in academia or otherwise — who asserts, as Slaughter does, that society should aspire to 50% representation of women. Without a critical understanding of whether or not such representation is actually effective and can have a positive impact on legislation specific to “women’s issues,” it is pointless to make equal representation the singular focus of those looking for policy outcomes that are friendlier to women. It is possible, even likely, that there are more worthy goals, such as efforts by legislatures and special interest groups to organize those women already in power positions. Additionally, strategic placement of women on various committees could have the effect of producing better policy outcomes on issues impacting women, health and families.

Yet, should it be determined that a critical mass of women does in fact correlate to the introduction of fewer anti-abortion bills, especially in the year of anti-abortion legislation, it could be a sign that legislatures respond to the presence of women in a positive way — that having women around provides a disincentive to introduce legislation that is explicitly harsh towards actual women members of the legislative body.

Of course, it is necessary to acknowledge that not all women identify as “pro-choice” and would perhaps be accepting or even supportive of anti-abortion measures. Women’s mere presence in state legislatures cannot possibly be the only factor determining the extent to which the legislature promotes aggressively anti-abortion legislation. Furthermore, it is impossible to ignore the role that party ideology plays in one’s position on abortion, and therefore the actions a

legislator takes in his or her official capacity as an elected leader on matters pertaining to abortion. Accordingly, in developing a research model and hypothesis for this project, it is necessary to put these issues front and center and to incorporate them into the project's plan. I will analyze states whose legislatures are controlled by Democrats separately from those controlled by Republicans.

There is also some evidence to suggest that Republican and Democratic women are often more ideologically disparate than their male counterparts for a variety of reasons (Frederick 2009). This could mean that, in Republican controlled legislatures with a significant percentage of female legislators, the presence of women might be negated by their outspoken support for anti-abortion legislation. I therefore anticipate that in legislatures controlled by Democrats, the presence of women will correlate more strongly to reduced anti-abortion sentiment, and in those red legislatures, the presence of women will have less of a moderating effect on the legislature's action on anti-abortion legislation.

The implications of this project are quite broad, as it has the potential to assess the efficacy of emphasizing an equal representation strategy for women in politics. Consequently, this research could help to answer the question of whether increasingly descriptive representation translates into substantive representation.

Background

Abortion

The spike in anti-abortion legislation following the 2010 election, which saw the transfer of power to Republicans in state legislative bodies across the country, was preceded by decades of state legislatures, Congress and the courts all wrestling with the landmark Supreme Court decision in *Roe v. Wade* (1973). Though the decision effectively legalized the practice of abortion, it did so tenuously, leaving the door open to restrictions to women's access to abortion. The majority opinion, written by Justice Harry A. Blackmun, argued that a woman's decision to get an abortion was protected by the constitutional right to privacy reaffirmed by *Griswold v. Connecticut* (1965) — in which the Supreme Court struck down a Connecticut ban on contraception, guaranteeing access to contraceptives to married couples — and *Eisenstadt v. Baird* (1972) — which extended access to contraceptives to single individuals (Balkin 2005).

Blackmun also asserted that life does not begin at conception, but avoided giving a definitive response to the question of when life begins (Balkin 2005). Instead, Blackmun applied the concept of trimesters within the period of a woman's pregnancy.

Following the medical thinking of the day, he divided the pregnancy into three trimesters. Until the end of the first trimester, 'the abortion decision and its effectuation must be left to the medical judgment of the pregnant woman's attending physician.' In the second trimester until the point of viability, the state may 'regulate the abortion procedure in ways that are reasonably related to maternal health.' After the point of viability (between twenty-four and twenty-eight weeks, around the beginning of the third trimester), states can 'regulate, and even proscribe, abortion except where it is necessary, in appropriate medical judgment, for the preservation of the life or health of the mother.' (Balkin 2005)

It is evident from the decision's language, which Balkin quotes, that the Court intended to leave the door open to further legislation and jurisprudence on the abortion question, if for no other

reason than at least to avoid answering the question of until when women should be allowed to abort a fetus (Balkin 2005).

It should come as no surprise, then, that in the years since *Roe*, legislators, judges and academics have been pondering and testing the limits to the legality of abortion. The first major blow to women seeking abortions was the Hyde Amendment, which was passed by the U.S. Congress in 1976. The amendment banned the use of federal money for abortion, and was upheld by the Supreme Court in 1980. Evidence to suggest that restricting funding for abortions is an effective way of limiting (legal) abortions, particularly among low-income women, further elevates the importance of the Hyde Amendment as a tool to reduce the number of abortions performed (Levine, et al. 1996).

A number of prominent court cases soon followed, most of which specifically upheld the Court's decision in *Roe*, though many resulted in further limitations to the accessibility of legal abortions. *Bellotti v. Bard* (1979) gave minors the option to petition the court to waive the parental notification requirement for getting an abortion (443 U.S. 622 (1979)); *Webster v. Reproductive Health Services* (1989) struck down Washington State laws banning use of public facilities for an abortion and a law asserting that life begins at conception (492 U.S. 490 (1989)); finally, in *Planned Parenthood v. Casey* (1992), the Court upheld a mandatory 24-hour waiting period and parental consent (505 U.S. 833 (1992)). Notably, *Casey* was a blow to the pro-choice movement, but still provided a resounding affirmation of the Court's opinion in *Roe*:

The woman's right to terminate her pregnancy before viability is the most central principle of *Roe v. Wade*. It is a rule of law and a component of liberty we cannot renounce. (505 U.S. 833 (1992))

These decisions cumulatively shaped the post-*Roe* legal climate surrounding abortion and reaffirmed the idea that though *Roe* was vulnerable to scratches and scrapes, it remained a sturdy foundation for the constitutional legality of abortion in the United States.

Some argue, though, that a right to abortion founded in constitutionality should not be the objective (West 2009), specifically because it has left the door open to states to chip away at access to abortion. While the courts have continued to reassert *Roe*, the states have attacked abortion rights from all angles, including, but not limited to: implementing abortion reporting requirements, banning partial-birth abortion, mandating abortion counseling, instituting waiting periods, limiting access to abortion-inducing drugs, requiring parental notification for minors seeking abortions, requiring abortion clinics meet new operating standards, requiring an ultrasound before the performance of an abortion, and banning the use of Medicaid funds for abortion, with exceptions for life endangerment (Guttmacher Institute 2013). Thus, despite *Roe*'s guarantee of abortion's legality, continued hostility of the states towards abortion in any circumstance could result in the effective disappearance of legal abortions in many states, without the overturning of the *Roe* decision.

The threat to legal, safe, affordable abortion is not so much that the Court may overturn *Roe*, but that abortion will become less and less available, because of the impact of legislative and political decisions made far from the Supreme Court's doors. Either way, the challenge to legal and safe abortion comes primarily from state politics and only secondarily from court action. Fixation on the Court and the narrowing constitutional right it has created as a way to secure legal abortion is just counterproductive (West 2009).

Despite the continuing threat to access to legal abortions that has existed since *Roe*, one could argue that the threat was never more imminent than in the wake of President Barack Obama's election in 2008. Gallup has been tracking public opinion on abortion since April 1975, two years after the *Roe* decision. On May 15, 2009, Gallup published a report with the title

“More Americans ‘Pro-Life’ Than ‘Pro-Choice’ for the First Time” (Saad 2009). The report showed that at the time, 51% of Americans claimed to be pro-life, while 42% identified as pro-choice. This is a marked difference from the results of the same poll conducted in 1995, in which 56% of respondents said they were pro-choice, while only 33% identified as pro-life. This is particularly surprising when contrasted with shifts in public opinion over the same period on other progressive issues. For example, Gallup has been polling on the issue of same-sex marriage for years. In 1996, 68% of Americans said same-sex marriages shouldn’t be recognized as valid, while only 27% said they should (Newport 2012). In 2009, 57% said they found same-sex marriages invalid, and 40% said they are valid. Finally in 2012, 50% of respondents said same-sex marriages should be valid, and a lesser 48% said they should not be. Thus, when comparing polling over the same period on abortion and same-sex marriage, it is clear the two have trended in rather the opposite direction, demonstrating once again that abortion policy in the United States is a unique and nuanced issue.

Of course, abortion policy within the sphere of state legislation is an important piece of the puzzle of understanding the history of abortion policy in the United States. According to the Guttmacher Institute, from 1985-2009, the record number of abortion restrictions enacted in a given year was 34 in 2005, with some years seeing next to none (Guttmacher Institute 2012). But in 2011, state legislatures across the country saw the introduction of 1,100 provisions¹ related to reproductive rights and reproductive health, and of those provisions, 135 were enacted in a total of 36 states. Thus, by any reading of the facts, anti-abortion sentiment in the states increased substantially around 2009 in the immediate aftermath of President Obama’s election. Though the success of abortion-restricting provisions may not have come as a shock to many — West asserts

¹ Note that a bill can consist of multiple provisions

that the reliance on *Roe v. Wade* as the foundation of abortion rights allows for attacks on abortion rights in the states — its impact is unmistakable, and the sharp spike in 2011 is an interesting phenomenon that deserves substantial attention.

Women in Elected Office

The first women to serve in any state legislature were Clara Cressingham, Carrie C. Holly, and Frances Klock, who were elected to the Colorado House of Representatives in 1894. Martha Hughes Cannon became the first female senator when she was elected to the Utah State Senate in 1896 (Center for American Women in Politics 2013). Thus marked the beginning of a slow but steady increase in women's presence in state legislative bodies. In 1975, women represented 8.1% of all officeholders in the United States, comprising a mere 4.5% of state senates across the country, and 9.3% of the lower chambers of state legislatures (Center for American Women in Politics 2013). In 2011, the year for which this study was conducted, women made up 23.6% of state legislatures overall, with women totaling 24.3% of seats in lower chambers, and 21.8% of seats in upper chambers across the country (National Conference of State Legislatures 2011). Women finally surpassed the 20% mark in 1993, though even in 2011, women failed to achieve a 20% minority in numerous states (Center for American Women in Politics 2013).

Based on the evidence provided above, it is clear that women have improved their proportion within elected office, and state legislatures more specifically, particularly since around the time of *Roe v. Wade* in 1973, when just 5.6% of state legislators were women (Center for American Women in Politics 2013). Yet, to what extent their presence has been gainful for American women is subject to interpretation. The years since *Roe v. Wade* have seen the growth of women in elected office, the growth of women's civil rights across the board and numerous

female presidential candidates (though none have yet been successful). Huge numbers of women attend and graduate from American colleges, and they are increasingly joining the ranks of university faculties across the country, including the University of Chicago (University of Chicago Women's Leadership Council 2012). And yet, policies that are uncharacteristically antagonistic towards women's rights have been growing in numbers since 2009. This contradiction begs the question: Do women in office really make a difference?

Literature Review

There are numerous studies that address the issue of whether descriptive representation of women translates into substantive representation. Additional research attempts to explain the voting patterns of women and the extent to which they reflect a gender-based voting bloc within Congress and state legislatures. The project at hand is unique in its attempt to describe the substantive effect of critical mass specifically on the issue of abortion, which has resurged as a prominent national issue in recent years. Nevertheless, it is important to grasp existing understandings of the impact of women's presence in politics to better understand the potential outcomes of this study.

Critical Mass

Critical mass theory explains the idea that it is difficult for women in elected office to effect policy for women unless women comprise a significant minority in a given body (Childs and Krook 2008). Critical mass is further used to refer to the concept of a threshold, wherein a certain percentage of women in a body is the magic number for having a considerable policy impact (Paxton et al. 2007). Drawing on the work of Rosabeth Moss Kanter, who argues that women who comprise less than 15 percent of a corporation or organization's membership are tokenized, Michelle Saint-Germain introduces the concept of skewed legislatures. Skewed legislatures are those that contain less than 15 percent women, indicating that 15 percent is the threshold number for women to make a more substantial difference in a legislature (Kanter 1977; Saint-Germain 1989, p. 959).

Others have argued that even in skewed legislatures, women can be effective in promoting women's issues (Bratton 2005). Kathleen Bratton's research looks specifically at how

women's sponsorship of legislation changes as their numbers grow, and concludes that women are actually more likely to actively sponsor bills, specifically women-centric bills, when there are fewer women in a body (Bratton 2005, p. 97). Though she suggests that gender differences tend to narrow as the legislature becomes more gender balanced, she fails to account for the fact that the need for women to introduce women's interests bills could diminish as their numbers increase. Furthermore, Bratton's research looks more at liberal leaning legislatures, which could mean that this conclusion is only relevant in bodies more inclined to listen to women legislators in the first place.

Additional literature points to different threshold numbers, with 30 percent of a legislature composed of women being the most popular (Paxton et al. 2007). It is impossible to talk about critical mass theory and the 30% threshold without addressing the work of Drude Dahlerup. Though Dahlerup is considered one of the two primary contributors to critical mass theory, along with Kanter, many argue that her intention was not to establish a threshold, but merely to discuss the experiences of women forming coalitions and collaborating in the minority (Childs and Krook 2009; Celis and Childs 2008). Dahlerup herself emphasizes what she calls "critical acts" over critical mass, arguing that the social climate doesn't automatically change when a minority group hits a certain number.

Maybe we should replace the concept of a *critical mass* with the new concept of a *critical acts*, better suited to the study of human behaviour. A critical act is one which will change the position of the minority considerably and lead to further changes (Dahlerup 1988, p. 296).

Dahlerup, who is frequently cited in literature discussing critical mass theory, herself argues that critical mass is not the most worthwhile goal. Nevertheless, she states that greater numbers of women do make a difference, making it difficult to discern where feminists should focus their attention in the political sphere (Dahlerup 1988, p. 297).

Thus, there is little evidence to suggest that critical mass is the magic bullet for achieving positive legislation for women, in that simply hitting a threshold percent of a body does not appear to drastically change conditions for female legislators (Paxton et al. 2007). Still, some researchers have been willing to pose the opposite argument. Saint-Germain argues that the 15 percent threshold is critical point in women's participation in a legislature. She claims women in the Arizona legislature began to introduce legislation beyond women's issues, introduce a greater number of bills, propose more serious legislation and were more successful with the legislation they sponsored after they hit the 15 percent mark (Saint-Germain 1989, p. 963).

Others still have failed to find similar success at any of the suggested thresholds, in keeping with Dahlerup's assessment. Some suggest that "token" women, or women serving in bodies with very few women, are more effective than women who are part of a larger group (Crowley 2004). Others still suggest that women legislators who are a part of a larger group of women are less likely to support women's issues (Carroll 2001).

Thus, conclusions regarding the effectiveness and relevance of critical mass theory are ambiguous, given that many are willing to assert that numbers matter, but most are unwilling to attribute success to any one proportion of a legislative body. Some research suggests that scholars' understanding of the impact of critical mass must be nuanced, taking into account that while increased numbers of female legislators will undoubtedly change the nature of the politics of "women's issues," it is not a given that women will coalesce when serving in the same body (Childs and Krook 2009, p. 126). In researching topics associated with critical mass, it is important to define in what ways one would expect to see critical mass working and to determine whether the idea of a threshold percent holds.

Descriptive v. Substantive Representation

In keeping with the theory of critical mass, descriptive and substantive representation are concepts critical to understanding the role of women in elected office. Celis and Childs summarize the theoretical link between descriptive and substantive representation:

Secondly, many feminist scholars emphasise a relationship, albeit ‘half fastened’, between the descriptive and the substantive component of representation; being female (‘standing for’) is conceived as an enabling condition for the substantive representation of women (‘acting for’) (Celis and Childs 2008, p. 419).

Evidently, though there is no definite relationship between descriptive representation — representation defined by the characteristics of the representative — and substantive representation — representation characterized by whomever the representative is acting for — the two are assumed to be related. Still, the extent to which descriptive representation is a condition for substantive representation of women, in particular, remains uncertain.

There is abundant literature seeking to define the connection between descriptive and substantive representation, and further analysis as to the best way to achieve substantive representation of women if increasing the numbers of women in elected office is the wrong approach. This review will tackle the perceived relationship between descriptive and substantive representation by addressing the literature outlining the substantive impact female legislators have for their female electorate, how they differ from male legislators and how this can be attributed to their descriptive representation.

There are a number of universal ways in which women legislators differ substantively from their male counterparts. For one thing, women are more likely than men to discuss women and women’s issues on the floor of the U.S. House of Representatives (Pearson and Dancey 2011). This study concludes that this is a significant outcome of having women in elected office

because it gives women's experiences and issues a voice in Congress that they wouldn't otherwise have. Pearson and Dancey also argue that this finding demonstrates a meaningful connection between descriptive and substantive representation, because without women on the floor to discuss women, such interests wouldn't be acknowledged (Pearson and Dancey 2011, p. 515). Others have confirmed these results, arguing that women are more likely to support "women's issues" in elected office (MacDonald and O'Brien 2010; Cowell-Meyers and Langbein 2009; Caiazza 2004; Saint-Germain 1989). As the percentage of women serving in the House of Representatives rises, the number of "feminist" bills women are predicted to sponsor increases (MacDonald and O'Brien 2010, p. 481). Saint-Germain asserts that women propose more legislation for women's issues than do men (Saint-Germain 1989). Others argue that descriptive representation encourages the female electorate to feel more included in the political process, beyond the fact that men and women represent different interests (Koning 2008).

Ideology has also been identified as a defining difference between male and female legislators that has implications for representation (Poggione 2004). Some research asserts that women are drastically more liberal than men when it comes to welfare policy, and those differences are more pronounced between conservative men and women (Poggione 2004). This finding implies that women can make more of a policy difference among Republicans because their opinions are more disparate. This contradicts other findings that the activity of Congressional women matches the policy preferences of the female electorate, and that their activity was noticeably distinct from that of men, particularly among liberal Democrats (Swers 2005, p. 427). Furthermore, descriptive and substantive representation are related, based on an analysis of cosponsorship activity by men and women in Congress (Swers 2005, p. 427). Thus, it is unclear among what groups differences between men and women are most distinct.

Still, additional research debunks the idea that gender is a defining characteristic of a legislator. Green finds that gender can be statistically significant when it comes to voting patterns, but ideology, partisanship, district, and race have stronger effects and therefore gender alone cannot describe roll-call voting behaviors (Green 2003, p. 88). Thus, though gender does make a difference, it should be clear that gender does not exist in a vacuum, and other characteristics can trump gender in representatives' legislative behavior.

Overall, these findings wholeheartedly support the idea that descriptive representation has tangible implications for the substantive representation of women, but raise questions as to where women can have the greatest impact. Furthermore, they attribute women's potential to impact policy to the differences between male and female legislators and female legislators' shared experiences with their female electorate.

Other research indicates there is a strong relationship between descriptive representation and substantive representation, but don't go so far as to attribute the correlation to the differences between men and women legislators. Some ascribe the success of favorable state level results for policies deemed "pro-woman" by women's organizations to greater descriptive representation of women (Cowell-Meyers and Langbein 2009). In states with greater numbers of women in the state legislature, the policy outcomes for programs like child support for single mothers were more favorable than in states less descriptive representation for women (Cowell-Meyers and Langbein 2009, p. 512). Similarly, Bratton and Ray find that descriptive representation for women leads to improved childcare coverage policy outcomes (Bratton and Ray 2002). Others investigating the effect of women's presence in state legislatures on policies affecting the elderly population find that women's presence leads to increasingly supportive policies for the elderly (Giles-Sims, Green and Lockhart 2012).

Additional research asserts that greater numbers of women in elected office have significant implications for the success of women-friendly policies in all types of government bodies throughout the United States (Caiazza 2004). Amy Caiazza finds that legislative bodies are the most successful medium through which greater numbers of women have the opportunity to effect change for women (Caiazza 2004, p. 59). She stresses the importance of context, including party, on the impact women legislators can have, arguing that Democratically controlled legislative bodies are more friendly to female political participation, which in turn allows women to find more success in those bodies. With respect to abortion policy in particular, research suggests that bodies with greater numbers of women are responsible for more liberal abortion policy, particularly in their resistance to parental consent laws, though other factors also produce similar results (Norrander and Wilcox 1999).

Of course, the experience of women in elected office isn't universally rosy. There is literature to suggest that the more women there are in a legislative body, the more male legislators are verbally aggressive towards women, and the more they attempt to take charge in a hearing (Kathlene 1994). Thus, though women have the potential to make significant policy changes for their female electorate, their increased presence in legislative bodies can be met with resistance, which could potentially taint their ability to successfully promote women-friendly legislation.

Other researchers question the effectiveness of female legislators. Some literature suggests that characteristics such as length of tenure and institutional position within a legislature have the greatest impact on leadership positions and effectiveness within the legislature, and when they are taken into account, there is no significant difference in effectiveness between men and women (Jeydel and Taylor 2003). Jeydel and Taylor find that women are less effective than

men in the legislature. Still, they fail to take into account the possibility that women have generally had shorter tenures and fewer leadership positions than men in the legislature, which implies that their “ineffectiveness” isn’t necessarily attributable to their gender, but the lack of experiences afforded to them because of their gender.

In spite of these concerns, others argue that women can be effective legislators. Thomas concludes that women do make a difference in state legislatures by introducing and guiding legislation dealing with women, children, and families, but that women are more successful when they have the support of their colleagues (Thomas 1991).

Descriptive representation has implications beyond women-friendly legislation. There is research to suggest that women voters are more conscious than men of gender in representation preferences, and are therefore more likely to want to be represented by women (Rosenthal 1995). Women’s desire for descriptive representation is related to their desire for substantive representation.

Finally, it must be acknowledged that not all female legislators are the same — the term female legislator encompasses a heterogeneous group of women representing different districts, interests and experiences. Most significantly from a representation standpoint, women identify with different political parties. As was alluded to in the discussion of Caiazza’s research, it is important to include party ideology in discussions of the policy preferences of women. There will be greater discussion of women’s ideological leanings and the differences between Republican and Democratic women later on, but for now it is important to note that issues deemed “women’s issues” tend to be considered more left-wing issues, which could diminish the potential impact of women on women’s issues should they follow the conservative party line (Frederick 2009). For this reason, Frederick argues that the link between descriptive and

substantive representation is conditional (Frederick 2009). Yet, Frederick is also quick to point out that his study is based on roll call voting, but a greater presence of women in a legislature can have an impact that goes beyond roll call voting (Frederick 2009). For example, as the number of women in elected office grows, so too do the differences between female legislators — the more women there are in public office, the more diverse women’s policy objectives will become (Kelly, Saint-Germain and Horn 1991).

Party and Gender

Much research has been done to explain the ideological differences between men and women and to what extent those differences are emphasized or diluted by party affiliation. Though many researchers have hypothesized that female legislators are more liberal than their male counterparts, some scholars have concluded that this assumption is overstated (Vega and Firestone 1995; Welch 1985).

Welch argues that women legislators are becoming more conservative, though they remain less conservative than their male counterparts (Welch 1985). Furthermore, because women in elected office are becoming more conservative, the gender gap in Congress may not reflect the same differences that exist between men and women in the general public (Welch 1985). Vega and Firestone find that the differences between Republican male and female legislators’ voting behavior are more pronounced and varied than those of Democratic men and women, but that overall there are not significant differences (Vega and Firestone 1995). The voting behavior of male and female legislators in Congress has also been demonstrated to be distinct, although party, district characteristics and constituency are better predictors of voting patterns (Vega and Firestone 1995).

Beyond the ideological differences between men and women, many have speculated as to how Democratic women differ from Republican women. Some argue that Democratic and Republican women are appreciably more ideologically divided than their male counterparts (Frederick 2009). This could be due in part to the greater party realignment and polarization in the United States in the post-Reagan era (Abramowitz and Saunders 1998). Frederick speculates that this can be attributed to changes in the structure of the Republican Party, wherein loyalty to the Republican Party platform is more important than seniority to moving up the committee ladder. Because of this, women feel the need to express their loyalty to the party higher-ups. Meanwhile, Frederick asserts that the electoral structure has encouraged Democratic women to move further to the left, as it can serve as an advantage in primary elections for safe seats, because Democratic activists have also become more liberal (Frederick 2009, p. 197). For example, support from EMILY's List has promoted liberal Democratic women within the party (Frederick 2009, p. 197). Thus, changes on both sides of aisle have pushed women to the furthest ends of their party, polarizing them in a way that hasn't evidently happened with the men.

Hogan has reinforced this finding, arguing that the differences between men and women are more distinct within the Democratic Party. Democratic women are more liberal than Democratic men, while Republican women are slightly more conservative than Republican men (Hogan 2008, p. 964). This concept is important when analyzing the potential impact of female legislators on state legislatures, in that Democratic women can be expected to take the liberal position on policy issues, particularly those pertaining to women, whereas the same expectation cannot be made of Republican women. This complicates our understanding of the role women play in fighting for and against women's issues and must be considered in analyzing the role women play in shaping abortion policy.

Caiazza also explores the relative success of Democratic and Republican women. She argues that female legislators are more successful in advocating for women-friendly policies in Democratically controlled state legislatures (Caiazza 2004). Nevertheless, she argues representation of Democratic and Republican women are critical to the success of women-friendly policy, as well as Democratic political power and public backing of women in elected office (Caiazza 2004, p. 59). Others concur, asserting that there is evidence to suggest that a critical mass of women in a state legislature can successfully change state abortion policy, with Democratic women being especially successful at creatively blocking anti-abortion legislation (Berkman and O'Connor 1993, p. 116).

It's clear that Republican and Democratic women are not identical and have disparate policy objectives and ideological leanings. These differences, though significant, should not undercut the contributions made by women on both sides of the aisle in promoting women's issues and contributing to legislative bodies on the whole. They also should not obscure the potential impact women's mere presence in a legislature can have in affecting the policy leanings of a body's members.

Abortion Attitudes

Much of the literature assessing abortion attitudes and policy trends in the United States is outdated, given that attitudes have changed in waves since the 1970's. Nevertheless, analyzing those changes is helpful to understanding contemporary attitudes, the future of abortion policy, and the potential significance of this study.

Though the Democratic Party's affiliation with the pro-choice position and the Republican Party's association with pro-life ideology is nearly unanimously accepted by the

American public, this hasn't always been the case (Adams 1997; Carmines et al. 2010). Scholars argue that the Democratic and Republican parties have changed drastically since the 1970's, especially with respect to abortion, though the change didn't occur in one fell swoop (Adams 1997). Some research attributes much of the Republican Party's position on abortion to President Ronald Reagan, whereas President Jimmy Carter's lack of pro-choice ideology weakened the Democratic Party's pro-choice message. This indicates that elite positions on abortion inform the positions of the masses (Adams 1997, p. 735). Thus, the two major American parties have grown with abortion ideology and in turn have helped to develop it in the decades since *Roe v. Wade*.

Additional research confirms that positions on abortion are very much ideologically motivated, and theorizes that a shift to a more pro-choice Congress would not come at the expense of a change in Republican abortion ideology, but rather a shift among Catholic Democrats to align more with their liberal Democratic views and away from their religious objections to abortion (Tatalovich and Schier 1993, p. 136). Furthermore, even abortion policies that are seemingly disparate, such as those that deal with the moral consequences of abortion as opposed to those that deal with economic consequences, are actually dealt with similarly on the political stage (Mooney and Lee 1995).

Public opinion in the United States towards abortion tends to be unpredictable and inconsistent (Legge 1983). Some research attempts to explain this trend by pointing out the complex nature of the abortion issue in general, which makes it difficult to try to classify different positions. Notably, some of this research is outdated, so it is unclear whether the same conclusions could be drawn from a similar, contemporary study.

Still, some conclusions can be drawn about those involved in the national abortion debate. Opponents of legalized abortion frequently ascribe more importance to the issue of abortion than

do its supporters (Scott and Schuman 1988). Whites are also more likely to emphasize the importance of abortion than are blacks, even though blacks tend to be opposed to abortion under any circumstance (Scott and Schuman 1988, p. 788). Not surprisingly, women feel more strongly than men about abortion, even though men are just as likely as women are to be pro-choice (Scott and Schuman 1988).

In terms of the impact of these players on policy, more recent research investigates instances where states have attempted to include the public in decisions about abortion policy. States that include the public in policy formation by way of initiatives and referenda better represent their public on the abortion issue (Arceneaux 2002). Furthermore, states with public support for abortion have fewer restrictive policies, women have more expansive access to abortion providers, and abortion is utilized more frequently (Wetstein and Albritton 1995).

Additional literature suggests that interest advocacy groups and other political forces are largely responsible for shaping abortion policy. Increased membership in NARAL, greater numbers of female state legislators, and a greater number of Democratic female legislators are all indicative of less restrictive abortion policy in a state (Medoff 2002). Medoff also asserts that abortion restrictions do not affect one's decision to get an abortion (Medoff 2002; Medoff 2012). Nevertheless, restrictive abortion laws do have a negative impact on the number of abortion providers that offer services in a given state (Medoff 2009).

Additional literature investigates the role of state legislatures in shaping abortion policy. Findings suggest state legislatures have a lot of power in determining abortion policy, meaning that if *Roe v. Wade* were to be overturned, the United States wouldn't see an automatic ban (Medoff 1989). Medoff claims eighteen states would likely ban legal abortion in the absence of *Roe*, while eight would be unlikely continue the practice of legal abortion (Medoff 1989, p. 190).

One must assess the value of this research in 2013 with skepticism, as the politics surrounding abortion policy have changed drastically. Nevertheless, this research has value in that it demonstrates the power of state legislatures to control abortion policy, and the implications of such power whether or not *Roe* is eventually banned.

Research on abortion policy is somewhat spotty and inconclusive, but at least some of that can be attributed to the unique location within the national political scene. In attempting to connect literature on abortion policy and the role of women in elected office, it's clear that any relationship between female legislators and abortion policy exists in a complicated and multifaceted context that includes party ideology, religious affiliation and moral qualms.

Hypotheses

Given the evidence to suggest the high capacity for female legislators' influence on policy in elective bodies (Berkman and O'Connor 1993; Thomas 1991), I expect a correlation to exist between the percentage of female legislators and the sheer number of anti-abortion bills both introduced and passed in state legislatures. I believe lower percentages and lower numbers of women will be indicative of higher numbers of anti-abortion bills introduced, meanwhile higher percentages of women will be indicative of fewer anti-abortion bills. A further analysis of the data will distinguish between red states — those state legislatures controlled by Republicans — and blue states — state legislatures comprised of a majority of Democrats — to further determine whether the correlation between greater gender equality and fewer abortion bills is stronger in Democratic bodies, Republican bodies, or neither. I anticipate that a greater percentage of women in state legislatures will have a greater impact on abortion policy in Democratically controlled bodies than Republican controlled bodies, due to a greater likelihood that the women in Democratic states are more liberal than women in Republican states.² I also expect my findings to suggest that the presence of women in blue states does have a greater impact on abortion policy than it does in red states because blue states are also typically more friendly to women and women's issues than red states (Caiazza 2004; Frederick 2009).

In looking at the effect of female legislators on anti-abortion policy in upper and lower chambers of state legislatures separately, I do not expect to see a significant difference between the effects of women in one chamber or another. Typically upper chambers of state legislatures are smaller than lower chambers. But, because my analysis is based on the percentage of women,

² Note that lower and upper houses of the legislature are analyzed separately, meaning that a split legislature will have no impact on the data.

not just the raw number, I do not expect the number of legislators in a given body or any other factors that distinguish upper chambers and lower chambers from one another to have a significant impact on the outcome of this study.³

Furthermore, the types of anti-abortion legislation being introduced vary from state to state. My research accounts for this by categorizing the different pieces of legislation into distinct categories. Taking into account these categorizations, I hypothesize that states with fewer women are more likely to introduce and are more likely to pass “symbolic” bills — those that in practical terms do nothing to restrict abortion, but nevertheless convey an attitude of hostility toward abortion or demonstrates support for the pro-life agenda. Since these bills have no significant policy implications for the legality of abortion in certain cases, I would guess that only states that have taken an extreme position on abortion successfully introduce bills of this nature. This assumes, of course, that the presence of women serves to temper the severity of state legislatures with respect to anti-abortion legislation, but given my foundational hypothesis, such an assumption would appear logical.

Finally, the decision to analyze the results in red states and blue states separately further implies that partisanship will be the most significant indicator of a body’s actions on anti-abortion legislation. In fact, this study hypothesizes that party ideology, and thus the party composition of a state legislature, is the biggest indicator of how a state legislator will move on anti-abortion legislation. Nevertheless, I expect to see that the percentage of women in state legislatures will serve as one way of predicting the amount of anti-abortion legislation introduced and the type of anti-abortion legislation introduced than other factors, such as state demographics.

³ Nebraska, which is unicameral (and nonpartisan), was assessed as an upper chamber for the purposes of this study

Data

The data used to conduct this analysis includes every abortion bill introduced in every state legislature in the year 2011, female state legislator data for the year 2011 and state level demographic information for all fifty states.

It should be noted that two states, New Jersey and Virginia, hold state legislative elections in odd numbered years. In those instances, I included bills collected from 2010 and female legislator demographic information from 2010, the rationale being that the wave of anti-abortion sentiment being analyzed in this study was sparked at least in part by a strong conservative response to President Barack Obama's election to President of the United States in 2008. The 2009 elections for state legislative offices in New Jersey and Virginia came in the wake of President Obama's election and came at the inception of the anti-abortion spike. Thus, including legislation from 2010 seemed most relevant to this study.

I collected the bills analyzed in this study from the LexisNexis State Capital database. To ensure my searches were all encompassing, I used two different search forms to return two different sets of results. I searched for the keyword "abortion" in both the "Bill Tracking by Keyword" and "Bill Text by Keyword" forms for the year 2011. This process returned two separate sets of results, and ensured that those bills that perhaps didn't use the word abortion but had implications for abortion policy were included. Meanwhile, I would weed through bills to eliminate those that made reference to abortion without actually affecting policy or taking a position on the issue.

The criterion for including a bill in the dataset was as follows: any bill that had an explicit or implicit impact on abortion policy and any bill that indicated a body's position on abortion and related issues was included. A bill that contained the word abortion in its text, but

made no reference to actual abortion policy or an official stance on the abortion issue, was excluded.

Once a bill was included in the dataset, I had to make further determinations about whether a given bill was anti-abortion or not. Any piece of legislation that explicitly restricted access to abortion, limited the types of abortion services available in the state, limited access to abortion, limited when and where an abortion can be administered, limited who can perform an abortion or restricted funding for an abortion was deemed an anti-abortion bill for the purposes of this research. There were numerous cases where the goals of a certain bill were ambiguous. In the case that I could not determine whether the intent of the bill was to express an anti-abortion position or restrict access to abortion, I would refer to Guttmacher Institute Factsheets, which explained actual impact of certain types of legislation. This shed light on the intent of a legislator or body in introducing a certain bill. Because many bills were nearly identical from one state and chamber to another, it was relatively easy to find information on bills.

If the Guttmacher Factsheets did not address a certain type of bill, I would refer to the positions of NARAL Pro-Choice America and Planned Parenthood and other pro-choice advocacy groups. I chose to follow the assessments of these organizations with the idea that, regardless of the actual impact of the bill, if one of these groups considered a bill to be anti-abortion, it's likely that said legislation was introduced with the intent of limiting abortion. Once again, the overlap of legislation from state to state made it easy to find the positions of pro-choice groups.

In addition to assessing whether a given bill was anti-abortion or not, I also sought to classify each bill by "type" to identify the nature and function of each bill. Using the Guttmacher

Factsheets, as well as my own observations of the bills collected, I identified 25 different bill types, which I coded numerically. The following are the 25 types of bills I identified:

1. Physician/hospital/clinic requirements dictating who can perform an abortion and where
2. Gestational limits (post-viability limit)
3. Partial birth abortion
4. Requires consent
5. Reduce or restrict public funding/coverage, private coverage
6. Refusal for reasons of conscience
7. State mandated counseling
8. Waiting periods
9. Parental involvement
10. Defining child/human; personhood
11. Protecting access to clinics
12. Restricts abortion inducing drugs
13. Reporting requirements
14. Ultrasound/pregnancy test requirements or suggestions
15. Access to contraception
16. License plate
17. Limiting or defining the use of family planning money
18. Limiting discussion of abortion in educational settings
19. Symbolic
20. Sex of the child
21. Other
22. Pro-choice; expresses positive sentiments towards abortion-related issues
23. Illegal unless protect life of mother
24. Illegal unless rape/incest
25. Coercion

In addition to the abortion-related bills, I also collected data for the number and percentage of women in each state legislature. For this, I used National Conference of State Legislatures data from 2011 to correspond directly to the bills being analyzed. For New Jersey and Virginia, for which I collected bills from 2010, I replaced the data from 2011 with the numbers of women in their state legislatures with 2010 data to reflect the gender composition of their bodies at the time the legislation being analyzed was produced.

In order to fully account for factors beyond the gender composition of state legislatures in explaining anti-abortion policy, I also collected state demographic data for each state. I compiled

information for all fifty states on each state's population, percent of non-Hispanic whites, percent of high school graduates, percent of Bachelor's degree holders, homeownership rate, median household income and percent of persons below poverty level for the year 2011 for the a span from 2007-2011. This information was collected from the U.S. Census Bureau. Furthermore, in order to more concretely gauge a state's ideological leanings, I also collected election results from 2008 assessing the percentage of a given state that voted for President Barack Obama. This information was collected from the U.S. Federal Election Commission.

Methods

The above data was collected with the intention of producing an explanation of the effect of women in state legislatures on the volume and type of anti-abortion legislation produced and passed in said bodies. To answer that question, I conducted a quantitative analysis to compare the number and percentage of women in state legislatures with the number of anti-abortion bills being produced and passed. Using STATA, I ran a number of t-tests and a series of regressions to compare the number of bills introduced in bodies with high percentages of women, or a proportion of women above the mean, and low percentages of women, or bodies with a proportion of women below the mean. I also broke up the data by chamber and party in control to determine the effect of women on abortion policy irrespective of party.

I also ran tests comparing the percentage and number of women to the total number of bills introduced in each body, the number of anti-abortion bills introduced in each body, the number of bills introduced but not passed and the number of bills that passed. I ran further tests analyzing the number of anti-abortion bills introduced in bodies with more than 30% women. All of these tests were also run as regressions controlling for the following state characteristics: 2011 state population, the percent of non-Hispanic whites in a given state, state residents with a Bachelor's degree and the percent of state residents living below the poverty line.

Results

State Characteristics

Before jumping into an explanation of the effect of women on abortion policy, it is important to first understand the nature of the states being examined and how their demographics explain the actions of their state legislatures. Furthermore, it is necessary to analyze how states with Democratically and Republican controlled legislative chambers differ from one another, and how states with high and low percentages of women differ from one another, to fully understand the significance of conclusions reached in this analysis.

The data indicates that states with Democratic majorities in their lower chamber have, on average, lower populations than states with Republican majorities (See Table 1). Similarly, states with lower chambers controlled by Democrats average a lower percentage of whites, meaning they also have greater percentages of people of color, have a slightly lower percentage of high school graduates, a greater percentage of residents with Bachelor's degrees, lower homeownership rates and greater median household incomes. A larger percentage of the vote went to President Obama in 2008 in states with Democratically controlled bodies, and these chambers introduced a smaller average of anti-abortion bills than states with Republican controlled chambers. Finally, Democratically controlled lower chambers average a higher proportion and greater number of women than their Republican counterparts. There is no statistically significant difference between poverty levels in states with Democratically controlled lower chambers and those with Republican controlled lower chambers.

Table 1:

Outcome: State characteristics by lower chamber

	Mean	Minimum	Maximum
Democratically controlled			
State population 2011	6810060	626431	3.77E+07
% Non-Hispanic whites	69.25629	22.9	94.2
% High-school education	85.19536	80.3	91
% Bachelor's degree	28.1	17.6	38.7
Homeownership rate	0.6688609	0.548	0.743
Median household income	54907.8	38718	72419
% Below poverty line	14.06291	9	21.6
% Voted for Obama 2008	54.10834	38.86	71.85
Number anti-abortion bills	7.352941	0	27
Percentage of women in chamber	27.11545	17.21312	38.66667
Number of women in chamber	28.17881	9	58
Republican controlled			
State population 2011	9740366	568158	2.57E+07
% Non-Hispanic whites	69.93671	44.8	94.3
% High-school education	86.10315	80.4	91.9
% Bachelor's degree	26.30909	21.1	36.3
Homeownership rate	0.6909126	0.643	0.736
Median household income	50152.55	42934	69014
% Below poverty line	14.60524	8	18.4
% Voted for Obama 2008	47.97724	32.54	57.71
Number of anti-abortion bills	8.8	0	43
Percentage of women in chamber	22.05207	12.90323	36.92308
Number of women in chamber	27.23427	10	98

The data is similar, but not identical, when looking at states with Democratically and Republican controlled upper chambers. There is no statistically significant difference between the percentage of white residents, high school graduates, and homeownership rates in states with Republican controlled upper chambers and those whose upper chambers are Democratically controlled (See Table 2). States with Democratically controlled upper chambers, much like those with Democratically controlled lower chambers, went for President Obama in greater numbers than states with Republican controlled upper chambers. They also introduce a lower average of abortion bills, have greater percentages of women and raw numbers of women than Republican

controlled upper chambers. Additionally, states with Democratically controlled upper chambers have a lower percentage of residents living below the poverty line. In all other categories, the results for states with Republican controlled upper chambers matches the data for those states with Republican controlled lower chambers.

Table 2:

Outcome: State characteristics by upper chamber

	Mean	Minimum	Maximum
Democratically controlled			
State population 2011	5918446	626431	3.77E+07
% Non-Hispanic whites	65.67664	22.9	94.2
% High-school education	86.35607	80.3	91
% Bachelor's degree	28.86168	17.6	38.7
Homeownership rate	0.6762056	0.567	0.743
Median household income	56218.1	38718	72419
% Below poverty line	13.28598	9	21.6
% Voted for Obama 2008	54.68692	38.86	71.85
Number of anti-abortion bills	4.947368	0	14
Percentage of women in chamber	26.04888	5.88235	48.57143
Number of women in chamber	8.495327	2	18
Republican controlled			
State population 2011	9308072	683932	2.57E+07
% Non-Hispanic whites	69.75263	44.8	94.3
% High-school education	85.81053	80.4	91.6
% Bachelor's degree	25.78842	20.6	33.1
Homeownership rate	0.6899789	0.548	0.736
Median household income	48713.85	42248	64664
% Below poverty line	15.21211	8	18.1
% Voted for Obama 2008	47.52774	34.35	60.8
Number of anti-abortion bills	6.576923	0	16
Percentage of women in chamber	20.10015	0	36.66667
Number of women in chamber	8.321053	0	20

A similar analysis was conducted to compare the demographics of states with high and low numbers of women overall. States with high numbers of women in both chambers — a percentage of women that lies above the mean — average lower state populations, higher high

school graduation rates, higher percentages of residents with Bachelor’s degrees, higher median household incomes, lower percentages of people below the poverty line and a higher percentage of the population that voted for President Obama in 2008 (See Table 3). In both chambers, there is a negligible difference in the percentage of white residents in states with high numbers of women compared to those with low numbers. The average percentage and number of women described in Table 3 represent the average among states with proportions of women above the mean and the average among states with proportions below the mean, not the overall average.

Table 3:

Outcome: State characteristics by proportion of women in state legislatures

	Mean	Minimum	Maximum
States with an overall proportion of women above the mean			
State population 2011	7406441	626431	3.77E+07
% Non-Hispanic whites	67.73528	22.9	94.3
% High-school education	87.59018	80.8	91.6
% Bachelor’s degree	29.76687	22.2	38.7
Homeownership rate	0.6755399	0.567	0.736
Median household income	56122.37	44631	72419
% Below poverty line	12.84785	8	19
% Voted for Obama 2008	54.22945	36.09	71.85
Number of anti-abortion bills	5.12963	0	14
Percentage of women	27.82577	22.7	41
Number of women	42.43865	14	104
States with an overall proportion of women below the mean			
State population 2011	9098084	568158	2.57E+07
% Non-Hispanic whites	70.5285	44.8	93
% High-school education	84.68052	80.3	91.9
% Bachelor’s degree	24.74086	17.6	34.4
Homeownership rate	0.690038	0.548	0.743
Median household income	48181.95	38718	63302
% Below poverty line	15.64371	10.1	21.6
% Voted for Obama 2008	46.73957	32.54	60.8
Number of anti-abortion bills	9.487805	1	43
Percentage of women	18.72209	9.4	22.4
Number of women	29.09976	11	45

The significance of these findings should not be understated. Most notably, the results for states with high numbers of women and states with Democratically controlled chambers do not match in all categories, and in some cases the results contradict. This demonstrates that the same characteristics that are indicative of greater numbers of women in the state legislature are not the same as the characteristics that define states with Democratically controlled bodies. Thus, party and gender are distinguishable as categories that define state legislatures. Evidence for or against the hypothesis that a greater percentage of women will correlate to fewer anti-abortion bills cannot be conflated with another hypothesis that asserts that states that with Democratically controlled bodies will produce fewer anti-abortion bills than their Republican counterparts. Moving forward with the results, it should be understood that party and gender are distinct in their implications for state demographics, and therefore the bodies that govern them.

Party Results

To avoid assumptions about whether or not Democratically or Republican controlled bodies were more or less likely to introduce anti-abortion bills, I conducted an analysis to determine whether or not a relationship existed between the controlling party and the number of anti-abortion bills produced. A series of t-tests and regressions failed to reveal a statistically significant relationship between a lower chamber’s controlling party and the amount of anti-abortion legislation introduced (See Table 4).

Table 4:

Outcome: Number of bills by controlling party

	Dem. mean	Rep. mean	95% Conf. Interval	P-value
Lower chambers	7.353	8.612	[-3.236, 5.756]	0.575
Upper chambers	4.947	6.429	[-1.187, 4.149]	0.269

The results for upper chambers were also inconclusive. Both regressions and t-tests failed to reveal a statistically significant pattern among the number of anti-abortion bills introduced and the controlling party in a given body (See Table 4). In other words, the difference between the number of anti-abortion bills introduced in Democratically and Republican controlled upper chambers, though not nonexistent, were negligible. Findings in both chambers contradict my hypothesis that party ideology is the primary determinant of a state's position on abortion policy. The results for both upper and lower chambers are important to keep in mind when analyzing the results of the relationship between the percentage of women in a state legislative body and the number of anti-abortion bills introduced, given that in both lower and upper chambers, no initial inclination to fewer or more anti-abortion bills exists due to party, making women's impact on the number of bills that much more relevant.

Overall Results

A t-test revealed that states with a high percentage of women overall averaged 11.03 abortion bills of any kind introduced in 2011, as compared to those bodies with low numbers of women, which averaged 18.77 bills. More importantly, states with high percentages of women averaged fewer *anti-abortion* bills, 5.13 bills, than states with low percentages of women, which averaged 9.49 bills (See Figure 1; Table 5). Results were statistically significant. These findings demonstrate that without accounting for other factors, such as controlling for party and state demographics, the percentage of women in a state or legislative body does correlate to fewer anti-abortion bills. The results held when assessing the bodies with more than 30% women, though the P-value remained slightly above 0.05 (See Table 5). Even after controlling for state level variables — state population, percent of non-Hispanic whites, percent with a Bachelor's

degree and percent below the poverty level — the results assessing the relationship between bodies with high percentages of women and fewer anti-abortion bills held (See Table 5).

Meanwhile, a test assessing whether or not the raw number of women is related to the number of anti-abortion bills produced demonstrated that, in fact, greater numbers of women in a state legislature do not correlate to lower numbers of anti-abortion bills. This indicates that it is the percentage of women in a given body, rather than the sheer number, that is indicative of how a body will behave with respect to anti-abortion legislation (See Table 5). This finding, which held both with and without state level variable controls, should not come as a surprise, since it includes the number of women in both upper and lower chambers, which tend to be average very different numbers of overall legislators.

Table 5:

Outcome: Number of anti-abortion bills

	<i>Isolated test</i>			<i>Control for state characteristics¹</i>		
	Coef.	P-value	95% Conf. Int.	Coef.	P-value	95% Conf. Int.
Bills introduced						
High percentage of women*	-4.358	0.000	[-6.749, -1.967]	-3.543	0.012	[-6.289, -0.798]
Percentage of women	-23.652	0.014	[-42.306, -4.998]	-15.382	0.173	[-37.658, 6.893]
Thirty percent women	-3.021	0.082	[-6.434, 0.392]	-0.980	0.597	[-4.649, 2.688]
Number of women	-0.021	0.577	[-0.096, 0.054]	0.018	0.684	[-0.0696, 0.106]
High number of women**	0.071	0.957	[-2.522, 2.665]	1.052	0.493	[-1.987, 4.091]
N = 95						
Bills passed						
High percentage of women*	0.2667	0.494	[-0.512, 1.045]	0.6397	0.138	[-0.214, 1.494]
Percentage of women	4.051	0.163	[-1.698, 9.799]	9.671	0.005	[3.134, 16.208]
Thirty percent women	0.405	0.519	[-0.849, 1.658]	1.285	0.101	[-0.262, 2.833]
Number of women	-0.008	0.638	[-0.043, 0.027]	0.003	0.867	[-0.037, 0.044]
High number of women**	0.029	0.946	[-0.815, 0.872]	0.361	0.444	[-0.581, 1.303]
N = 49						

* Refers to whether body has a percentage of women above the mean (22.695%)

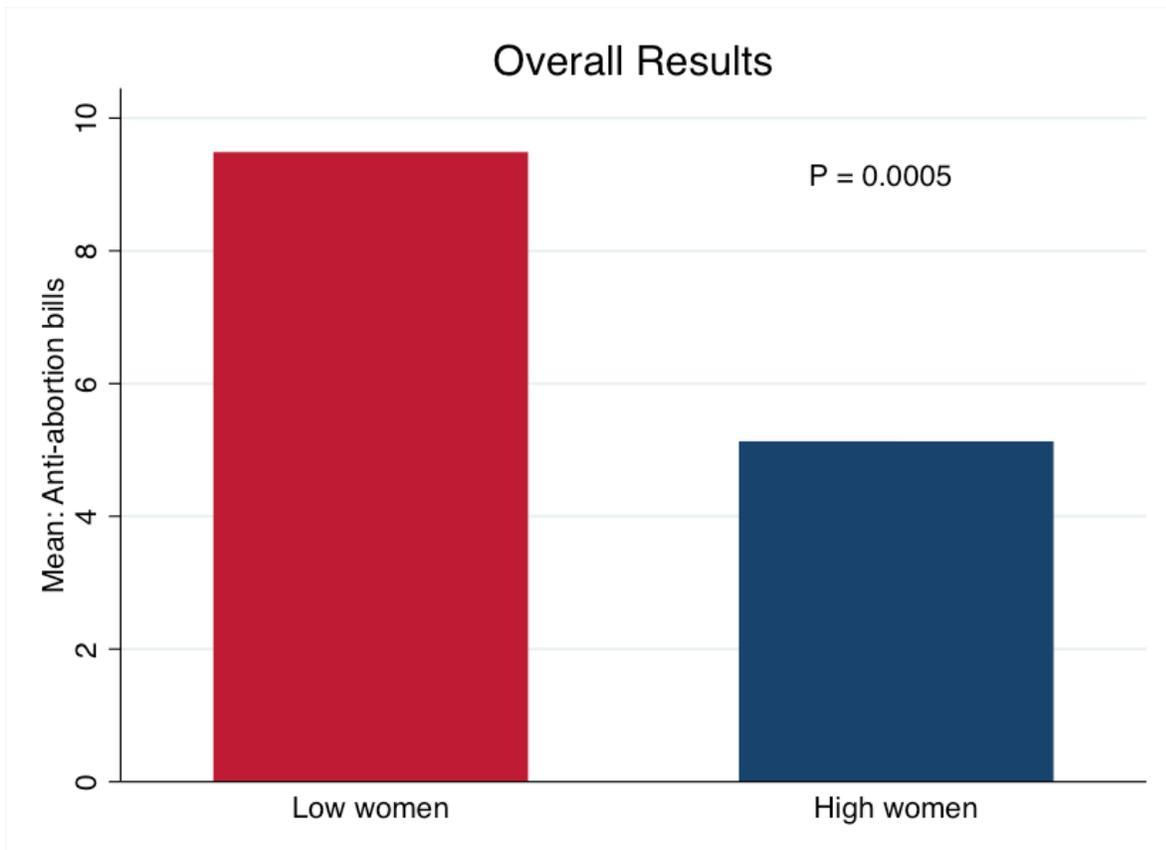
** Refers to whether body has a number of women above the mean (34.92)

¹ State characteristics controlled for include: state population, % non-Hispanic whites, % with Bachelor's degree, % below poverty level

Notably, these results failed to hold when assessing just those bills that were passed. Given that a total of 696 bills were included in the count of anti-abortion bills introduced, and just 99 were included among those that passed, the amount of available data to work with in the analysis of bills passed was much smaller, and therefore fairly less significant and substantively diverse than the dataset that included all bills introduced (and passed).

Evidently, when controlling for state level variables, the regression assessing the relationship between the percentage of women and the number of anti-abortion bills becomes statistically significant, but indicates that higher percentages of women are associated with greater numbers of anti-abortion bills. Given that this result is isolated, it seems dubious to read too much into it.

Figure 1:



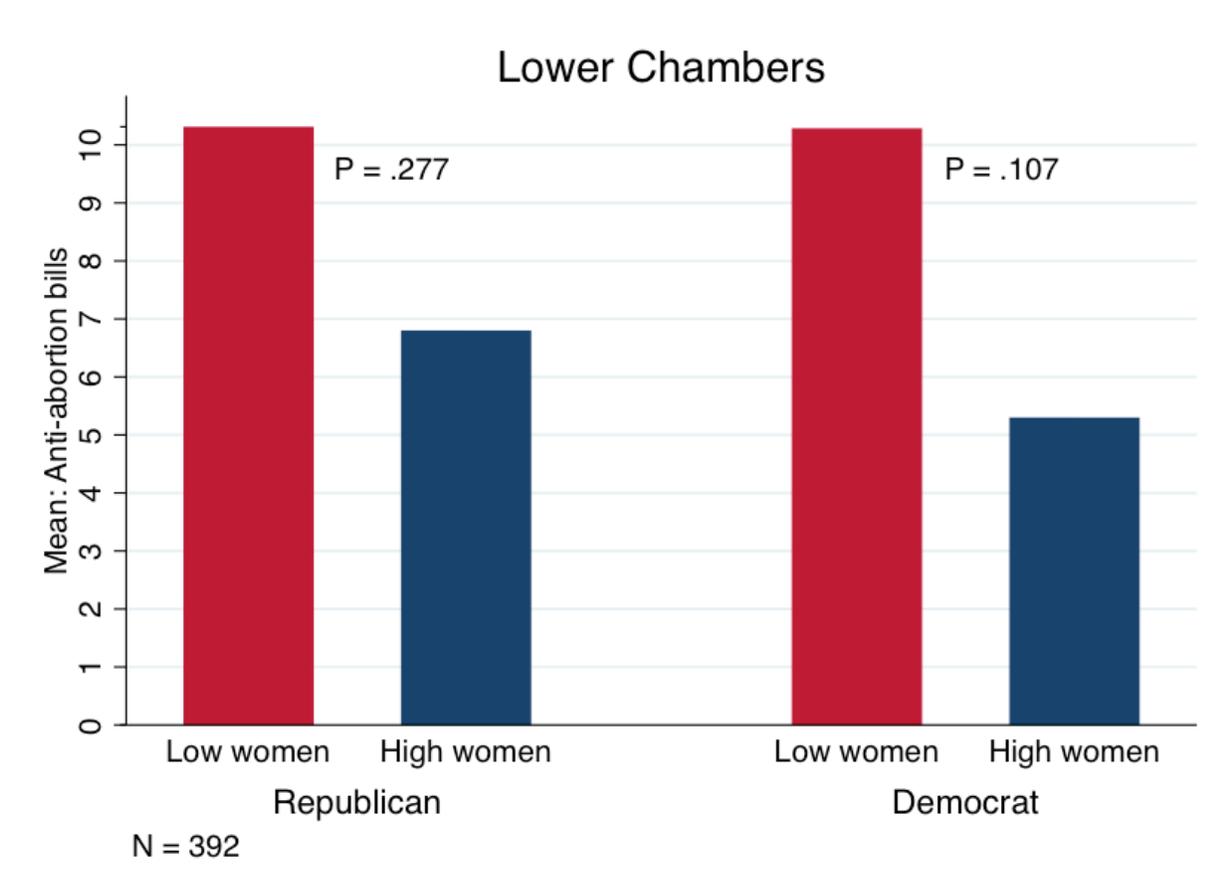
Lower Chambers

As expected, the percentage of women in Democratically and Republican controlled lower chambers had distinct effects on their respective bodies. To some extent, a relationship did emerge between lower percentages of women and greater numbers of anti-abortion bills. A t-test comparing bodies with percentages of women above the mean in Democratically controlled lower chambers to anti-abortion bills introduced demonstrated a lower proportion of anti-abortion bills were introduced in bodies with a percentage of women above the mean—a result that proved statistically significant (See Table 7). For this test, the dataset contained a row for every bill, which is why this test merely measured the proportion abortion bills introduced that were anti-abortion, rather than the average number of bills. Unlike the overall results, the relationship held when comparing the raw number of women in a given body to the proportion of anti-abortion bills introduced — even a greater number of women, regardless of what percentage of a body they comprise, correlates to a lower proportion anti-abortion bills introduced in Democratically controlled lower chambers.

A t-test comparing the number of bills introduced in each body to whether a body contained a high or low proportion of women did reveal a relationship between more women and fewer bills, but this result was not statistically significant (See Figure 2; Table 6). The relationship between more women and fewer bills did not hold when looking at the proportion of anti-abortion bills introduced in chambers with more than 30% women (See Table 6), though chambers with more than 30% women introduced a significantly smaller proportion of anti-abortion bills than did the other bodies (See Table 7). This would appear to indicate that the theory claiming that bodies comprised of 30% women aren't conclusively more friendly to women than bodies where fewer than 30% of the legislators are women. It is also significant to

note that when controlling for state level variables, which included state population, percent of non-Hispanic whites, percent with a Bachelor’s degree and percent below poverty level, none of the results held. It is difficult to ascertain whether this is because state level variables accurately predict whether a body will have a high or low percentage and number of women, or whether state level variables are more accurate predictors of a state’s position on abortion policy than the number of women in its state legislature.

Figure 2:



The results in Republican controlled lower chambers were less consistent with the overall results. Though a t-test analyzing the relationship between a high percentage of women and the number of anti-abortion bills introduced in a body demonstrated a weak relationship between

greater percentages of women and fewer bills, the result was not statistically significant (See Figure 2; Table 6). A t-test assessing the proportion of abortion bills introduced that were anti-abortion also failed to yield statistically significant results, as did additional t-tests and regressions comparing the proportion of anti-abortion bills introduced in bodies with more than 30% women and above average numbers of women (See Table 7). Furthermore, no relationship emerged between the sheer number of women in a body and the number of anti-abortion bills introduced, which is inconsistent with the results incurred in Democratically controlled bodies.

An analysis of the number of anti-abortion bills that ultimately passed and the number of women in a given body also failed to produce statistically significant results indicating any type of pattern. In Republican controlled lower chambers, only 24 anti-abortion bills were introduced in bodies with more than 30% women. Despite this low number, an analysis of the proportion of abortion bills that were anti-abortion introduced in bodies with more than 30% women showed a vague relationship between those bodies and a smaller amount of anti-abortion legislation, but the correlation wasn't steep enough to be significant (See Table 7). Notably, the coefficients for all tests conducted in Republican lower chambers were negative, except for those assessing the raw numbers of women, even though the results failed to be statistically significant (See Tables 6 and 7). When controlling for state level characteristics — state population, percent of non-Hispanic whites, percent with a Bachelor's degree and percent below poverty level — the results for all tests became even less significant (See Tables 6 and 7).

Table 6:

Outcome: Number of anti-abortion bills introduced in lower chambers

	<i>Isolated test</i>			<i>Control for state characteristics[†]</i>		
	Coef.	P-value	95% Conf. Int.	Coef.	P-value	95% Conf. Int.
Democratically controlled bodies						
High percentage of women*	-4.986	0.107	[-11.179, 1.208]	-2.351	0.555	[-10.85, 6.149]
Percentage of women	-37.717	0.151	[-90.819, 15.386]	-23.145	0.529	[-101.57, 55.276]
Thirty percent women	-2.348	0.477	[-9.204, 4.507]	0.254	0.955	[-9.394, 9.902]
Number of women	-0.071	0.570	[-0.3316, 0.1896]	-0.046	0.803	[-0.442, 0.350]
High number of women**	-2.543	0.426	[-9.171, 4.085]	-1.596	0.751	[-12.372, 9.1798]
N = 17						
Republican controlled bodies						
High percentage of women*	-3.241	0.277	[-9.225, 2.743]	0.582	0.797	[-4.032, 5.196]
Percentage of women	-17.555	0.479	[-67.724, 32.614]	-10.623	0.593	[-51.086, 29.841]
Thirty percent women	-4.385	0.317	[-13.196, 4.427]	-2.047	0.538	[-8.807, 4.714]
Number of women	0.023	0.801	[-0.1597, 0.2052]	-0.012	0.880	[-0.170, 0.147]
High number of women**	3.3	0.296	[-3.044, 9.644]	0.006	0.927	[-0.139, 0.152]
N = 30						

* Refers to whether body has a percentage of women above the mean (23.28%)

** Refers to whether body has a number of women above the mean (27.49)

[†] State characteristics controlled for include: state population, % non-Hispanic whites, % with Bachelor's degree, % below poverty level**Table 7:**

Outcome: Proportion of abortion bills introduced in lower chambers that were anti-abortion

	<i>Isolated test</i>			<i>Control for state characteristics[†]</i>		
	Coef.	P-value	95% Conf. Int.	Coef.	P-value	95% Conf. Int.
Democratically controlled bodies						
High percentage of women*	-0.154	0.012	[-0.273, -0.034]	-0.002	0.981	[-0.188, 0.184]
Percentage of women	-1.949	0.001	[-3.041, -0.858]	-1.449	0.190	[-3.626, 0.728]
Thirty percent women	-0.214	0.001	[-0.338, -0.089]	-0.170	0.121	[-0.386, 0.046]
Number of women	-0.009	0.004	[-0.0154, -0.003]	-0.007	0.099	[-0.016, 0.001]
High number of women**	-0.152	0.017	[-0.276, -0.028]	-0.098	0.278	[-0.277, 0.08]
N = 151						
Republican controlled bodies						
High percentage of women*	-0.098	0.248	[-0.101, 0.026]	0.025	0.539	[-0.055, 0.105]
Percentage of women	-0.165	0.594	[-0.774, 0.444]	0.095	0.790	[-0.609, 0.7995]
Thirty percent women	-0.098	0.085	[-0.2096, 0.0137]	-0.054	0.380	[-0.174, 0.066]
Number of women	0.001	0.466	[-0.002, 0.004]	0.001	0.404	[-0.002, 0.004]
High number of women**	0.556	0.082	[-0.007, 0.119]	0.071	0.064	[-0.004, 0.147]
N = 286						

* Refers to whether body has a percentage of women above the mean (23.28%)

** Refers to whether body has a number of women above the mean (27.49)

[†] State characteristics controlled for include: state population, % non-Hispanic whites, % with Bachelor's degree, % below poverty level

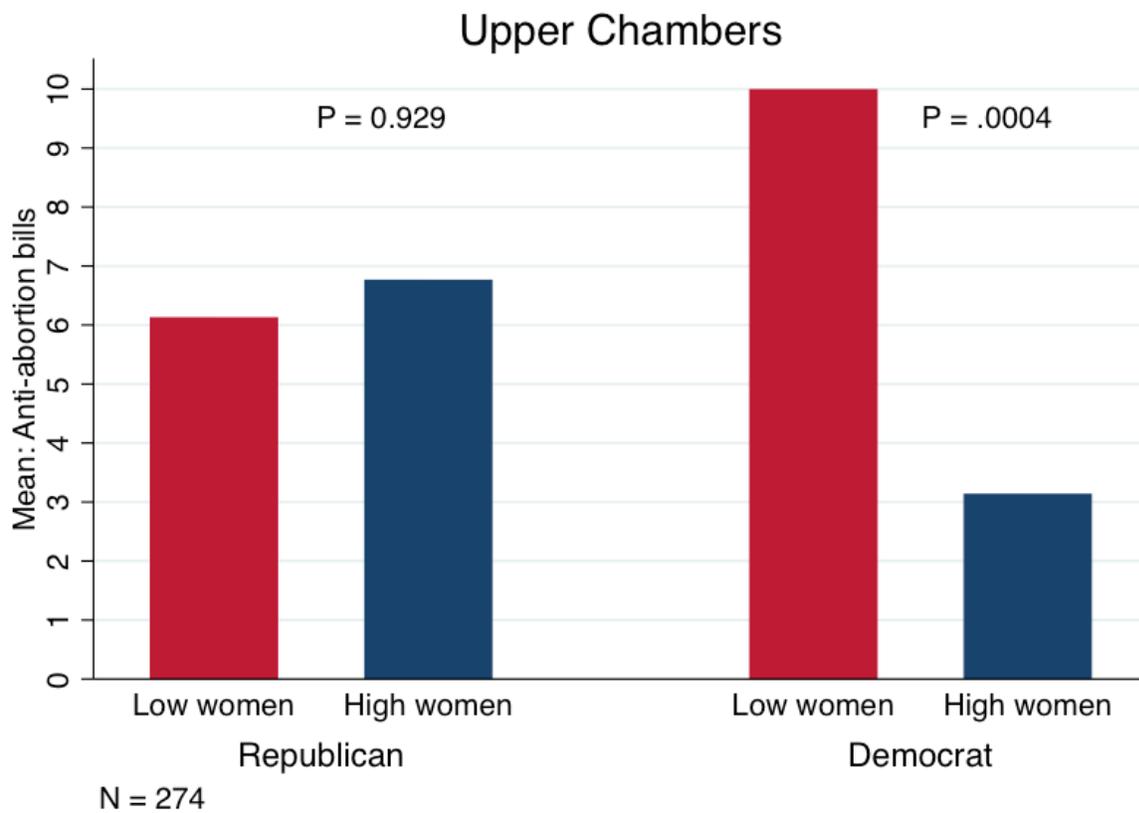
Upper Chambers

In keeping with the overall results and those in the lower chambers, Democratically controlled upper chambers with high percentages women introduced fewer anti-abortion bills than did those bodies with fewer women (See Table 8). Bodies with a percentage of women above the mean introduced an average of 3.14 anti-abortion bills, as opposed to the average 10 introduced by bodies with a percentage of women below the mean (See Figure 3; Table 8). The number of anti-abortion bills introduced was not significantly different in bodies with low and high raw numbers of women, irrespective of what percentage of the body they comprised (See Table 8). When the same test was conducted for bodies with a percentage of women above 30%, one number put forth as representative of critical mass (Dahlerup 1988), the results were nearly as strong (See Table 8). This result would seem to reinforce the idea that critical mass exists, since the results were strong when testing for both bodies with a percentage of women above the mean and bodies with a percentage of women above 30%. Nevertheless, it seems to be a stretch to call a 30% proportion of women a tipping point for women-friendly legislation, or at least anti-abortion legislation, since these results were not uniform across all bodies. It should also be noted that the proportion of abortion bills that were explicitly anti-abortion introduced in Democratically controlled upper chambers was notably lower for bodies with a high proportion of women (See Table 9).

The most significant finding from the analysis of Democratically controlled upper chambers is that which demonstrates that even after controlling for state level variables, the results indicating more women correlate to fewer anti-abortion bills held (See Tables 8 and 9). This reinforces the strength of the connection between women in these bodies and less

aggressive abortion policy, because it indicates that state level variables alone cannot account for the lack of anti-abortion legislation. And since this finding inherently controlled for party, and Democratically controlled upper chambers are no more likely to introduce fewer anti-abortion bills, it seems logical to conclude that only greater numbers of women can explain the lack of anti-abortion legislation introduced.

Figure 3:



Much like occurred in the lower chambers, the results in Republican-controlled upper chambers did not show a statistically significant difference between the number of anti-abortion bills introduced in states with high percentages and low percentages of women (See Table 8). In

fact, the results demonstrate the anti-abortion activity was pretty much the same across the board, regardless of a body's percentage of women (See Figure 3; Table 8). Even when testing just for the proportion of abortion bills introduced that were anti-abortion, results failed to demonstrate a meaningful connection between more women and a lower proportion of anti-abortion bills in Republican controlled upper chambers (See Table 9). Though not statistically significant, it's worth noting that the coefficients for regressions testing the relationship between women and anti-abortion legislation were positive, meaning that if anything, bodies with more women introduce more anti-abortion legislation (See Tables 8 and 9). Because these results were far from statistically significant, it is hard to read too much into them.

When comparing the raw number of women in a body and high numbers of women in a body to the number of bills introduced, no meaningful relationship exists (See Table 8). Finally, much like in both sets of lower chambers, the results did not change much when controlling for state level variables.

Assessing the effect of having more than 30% women in a Republican controlled upper chamber — only four Republican controlled upper chambers had more than 30% women — revealed that the chambers with more women actually averaged a greater number of anti-abortion bills introduced than chambers with less than 30% women (See Table 8). The same holds true for the number of bills both introduced and passed, though none of these results were statistically significant. This findings imply that a “critical mass” of women had virtually no effect on the number anti-abortion bills produced in Republican controlled Senates, which debunks the idea that a critical mass of women is the impetus for increasingly friendly policies toward women.

Table 8:

Outcome: Number of anti-abortion bills introduced in upper chambers

	<i>Isolated test</i>			<i>Control for state characteristics[†]</i>		
	Coef.	P-value	95% Conf. Int.	Coef.	P-value	95% Conf. Int.
Democratically controlled bodies						
High percentage of women*	-6.857	0.000	[-10.14, -3.573]	-7.360	0.002	[-11.426, -3.295]
Percentage of women	-24.713	0.008	[-42.183, -7.242]	-31.214	0.014	[-55.029, -7.399]
Thirty percent women	-4.551	0.025	[-8.463, -0.6395]	-4.872	0.048	[-9.696, -0.049]
Number of women	-0.391	0.148	[-0.937, 0.154]	-0.496	0.247	[-1.380, 0.388]
High number of women**	-3.9	0.042	[-7.639, -0.161]	-5.263	0.070	[-11.016, 0.4899]
N = 19						
Republican controlled bodies						
High percentage of women*	1.667	0.929	[-3.67, 4.004]	2.095	0.229	[-1.425, 5.615]
Percentage of women	5.595	0.624	[-17.664, 28.855]	11.889	0.245	[-8.836, 32.614]
Thirty percent women	3.455	0.175	[-1.645, 8.554]	2.349	0.297	[-2.230, 6.928]
Number of women	0.153	0.532	[-0.345, 0.651]	0.314	0.151	[-0.124, 0.752]
High number of women**	1.988	0.296	[-1.855, 5.830]	1.298	0.447	[-2.192, 4.787]
N = 28						

* Refers to whether body has a percentage of women above the mean (20.35%)

** Refers to whether body has a number of women above the mean (8.17)

[†] State characteristics controlled for include: state population, % non-Hispanic whites, % with Bachelor's degree, % below poverty level**Table 9:**

Outcome: Proportion of abortion bills introduced in upper chambers that were anti-abortion

	<i>Isolated test</i>			<i>Control for state characteristics[†]</i>		
	Coef.	P-value	95% Conf. Int.	Coef.	P-value	95% Conf. Int.
Democratically controlled bodies						
High percentage of women*	-0.162	0.010	[-0.284, -0.039]	-0.153	0.022	[-0.283, -0.023]
Percentage of women	-1.116	0.001	[-1.794, -0.439]	-1.243	0.004	[-2.075, -0.410]
Thirty percent women	-0.364	0.000	[-0.514, -0.215]	-0.3498	0.000	[-0.525, -0.174]
Number of women	-0.024	0.027	[-0.046, 0.003]	-0.020	0.154	[-0.048, 0.008]
High number of women**	-0.198	0.002	[-0.323, -0.074]	-0.205	0.007	[-0.353, -0.056]
N = 107						
Republican controlled bodies						
High percentage of women*	0.055	0.209	[-0.031, 0.142]	0.055	0.344	[-0.059, 0.169]
Percentage of women	0.300	0.215	[-0.174, 0.774]	0.240	0.437	[-0.368, 0.849]
Thirty percent women	0.034	0.520	[-0.071, 0.139]	-0.0096	0.883	[-0.139, 0.119]
Number of women	0.005	0.359	[-0.005, 0.015]	0.007	0.371	[-0.008, 0.022]
High number of women**	0.032	0.468	[-0.055, 0.119]	0.011	0.867	[-0.114, 0.135]
N = 190						

* Refers to whether body has a percentage of women above the mean (20.35%)

** Refers to whether body has a number of women above the mean (8.17)

[†] State characteristics controlled for include: state population, % non-Hispanic whites, % with Bachelor's degree, % below poverty level

Assessment of Bill Types

Of the bill categories I coded for, not surprisingly, legislation dealing with the funding of abortions, be it public or private funding, were introduced most frequently, with 141 of the 696 bills dealing with funding in one way or another, accounting for more than 20% of all bills introduced. No other bill type rivaled funding bills; bills dealing with restrictions on hospitals, clinics and doctors were the second most common, accounting for more than 10% of all bills introduced, and bills categorized as “other” accounted for nearly 10% of all bills as well (See Appendix, Table A).

Despite the high level of variance among the anti-abortion bills introduced in 2011, analyses of different bill types produced mixed results with respect to patterns explaining which states were more likely to introduce certain types of legislation, particularly when accounting for the results incorporating all bill types. For example, an assessment of the relationship between funding bills and the number of women revealed similar results to the overall results when testing across the board. However, analyses of individual chambers, failed to generate meaningful results in lower chambers, both Republican and Democratically controlled, or in Democratically controlled upper chambers. Unexpectedly, Republican controlled lower chambers did demonstrate a statistically significant connection, albeit a weak one, between high numbers of women and fewer numbers of funding-related anti-abortion bills. Though idiosyncratic, because these results are inconsistent with the findings among all types of bills, they fail to explain the effect of women on funding bills, as these findings can likely be attributed to circumstance.

Symbolic Bills

In order to better understand the contribution of greater numbers of women to state legislative bodies, this study questioned whether any meaningful connections exist between the percentage of women in a given body and the types of legislation produced there. One category of bill that I found particularly intriguing was that which I deemed symbolic — or those bills that did not technically change policy with respect to abortion, but reflected a certain animosity to the practice that went beyond simply wanting to make it illegal. Most of the bills categorized as “symbolic,” such as Alabama’s H.R. 15, recognized the contributions of pregnancy care centers and the importance of abstinence education. Bills recognizing pregnancy care centers were introduced in different forms in bodies across the country in 2011. Another bill deemed symbolic is South Carolina’s H.B. 3946, which establishes an Unborn Children’s Monument Commission with the goal of building a monument to unborn children on the State House grounds.

The findings of this analysis were mixed, and lead to some interesting conclusions about the sources of symbolic anti-abortion legislation. Because of the small sample of symbolic bills, a sweeping look at such legislation indicated no statistically significant relationship between fewer women and the introduction of such legislation in any type of body controlled by either Republicans or Democrats. But, a closer look yields some interesting observations.

Democratically controlled upper and lower chambers with percentages of women above the mean did not introduce a single symbolic bill in the year 2011 (Figures 4 and 5). Furthermore, when testing for the number of symbolic bills introduced by state, statistically significant connections exist between high percentages of women and low numbers of symbolic bills in both Democratically controlled upper chambers and in all lower chambers combined. The

combination of all these findings leads to the conclusion that greater numbers of women can signify the introduction of fewer symbolic bills.

Figure 4:

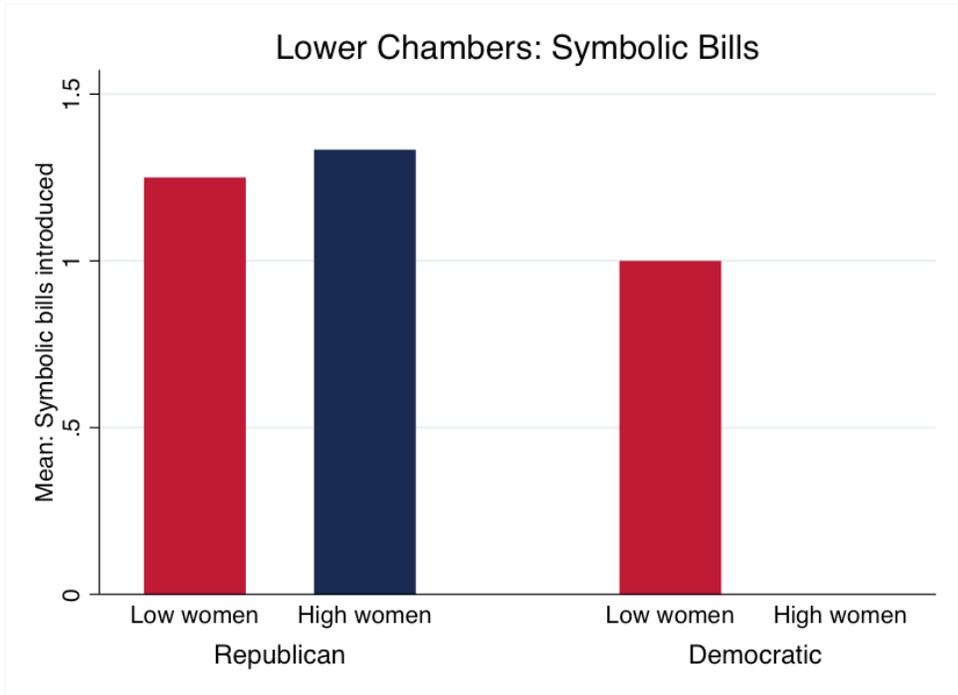
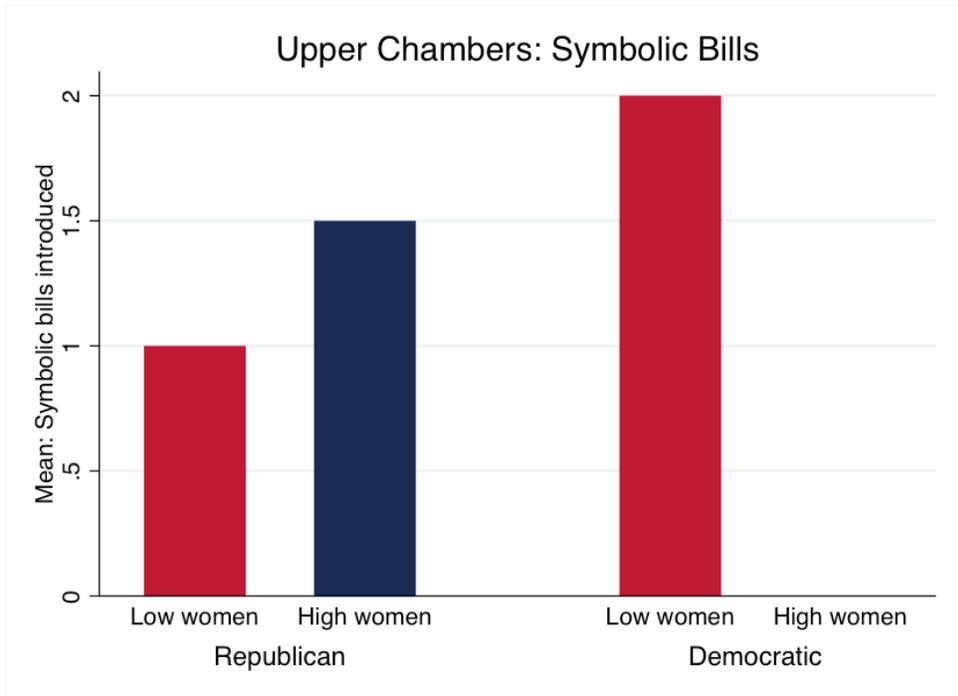


Figure 5:



‘Choose Life’ License Plates

Similar to the those bills deemed symbolic, legislation coded as “license plate bills” — bills providing for the legality of ‘Choose Life’ license plates — seemed to have the potential for fruitful results with to the relationship between certain types of bills and the number of women in a given body. Yet, no connection appears to exist between the introduction of “Choose Life” bills and the number of women in a body or the party in control of a given chamber, in part because there is not enough data to do a reliable analysis.

Thus the results for bill types appear to be mixed. Analyses reveal idiosyncratic patterns across different chambers and varying percentages of women, and yet no definitive conclusions can be made from these findings.

Discussion

In an attempt to answer the initial question posed by this project, that being whether or not the mere presence of women makes a difference in state legislatures, it seems clear from the data that female legislators do make a tangible policy impact that is favorable to women, at least in terms of abortion policy. Whether or not this is attributable to women's mere presence, women's ideological tendencies, or some other factor is difficult to ascertain, but it's clear from the data that it's not solely a function of the Democratic Party's policy leanings. Thus, it must be concluded that women are in some ways responsible for positive policy outcomes on the abortion issue. Once again, it is acknowledged that women are not unanimously in favor of pro-choice legislation. Still, less severe restrictions on abortion are pretty generally considered a feminist issue and an outcome that favors women's rights, and for the purposes of this study, anti-abortion legislation was deemed unfriendly to women.

Furthermore, the results of this study could be explained by the research of scholars like Frederick and Hogan, who assert that while female Democratic legislators may be slightly more liberal than their male counterparts, Republican women are slightly more conservative than men (Frederick 2009; Hogan 2008). This could explain why, in keeping with my initial hypotheses, the results in Republican controlled bodies were less authoritative than those in Democratically controlled bodies, and why a more definitive link between greater percentages of women and fewer numbers of anti-abortion bills was identifiable in blue chambers. Furthermore, the finding that the percentage of women in state legislatures has a greater impact in Democratically controlled bodies seems to confirm some of the assessments made by Caiazza and others that women acting in Democratically controlled bodies will find more success in promoting women-friendly policy than women in Republican-controlled bodies (Caiazza 2004).

Perhaps most notably, the results of this study have implications for our understanding of the concept of critical mass. Though there was a clear link in some instances between chambers that reached the 30% mark in terms of the proportion of women that existed in the body, this link could not be extended to all chambers, particularly not those controlled by the Republican Party. For this reason, it is difficult to conclude that the concept of critical mass, particularly when embedded with the idea of a proportion threshold, holds true when it comes to women and policy favorable to women's rights. Regardless of whether or not a 30% threshold exists, it's clear that critical mass is not a magic bullet for positive change within the women's rights movement; the fact that critical mass was more effective for reducing anti-abortion policy in Democratically controlled bodies than Republican controlled bodies demonstrates that women alone can't create women-friendly policy. Such change can only occur in the event of a combination of greater numbers of women who are in favor of reducing abortion restrictions and a body that is inclined to be friendly toward women's issues, either independently or due to its ideological leanings (Frederick 2009; Caiazza 2004).

Still, the significance of greater proportions of women in certain bodies cannot be ignored. Bodies with higher numbers of women proved, across the board, that they could and would produce less anti-abortion legislation, though the results were only statistically significant in Democratically controlled bodies and in the overall analysis. Moreover, when the number of women increased to 30% in bodies that already demonstrated a statistically significant connection between high numbers of women and low numbers of anti-abortion bills, that same relationship was upheld. In some cases, the relationship became even more pronounced, establishing even more so the connection between high numbers of women and more women-friendly policy. This indicates that the connection between descriptive and substantive

representation is meaningful, and must be considered when strategizing on behalf of policies beneficial to women. Of course, when controlling for state level variables, the results in all bodies except for Democratically controlled upper chambers were called into question. Remarkably, though, the results in Democratically controlled upper chambers did hold up, which leads to the conclusion that there's something about those bodies and the women who serve in them that is noteworthy.

Though the findings of this study are illuminating, there are various ways in which the results could be solidified or extended through future research. While the implications of this research are vast for understanding the contribution of women to state legislatures, particularly in terms of "women's issues," the opportunity for a more focused study of the behavior of women as political actors in state legislatures would be beneficial. Much literature exists to identify the roll call voting patterns of female legislators (Frederick 2009; Barnello 2008), but there is room for growth with respect to understanding who is actually responsible for producing anti-abortion and pro-choice legislation — for example, how often do women actually sponsor anti-abortion legislation rather than simply vote for it.

Furthermore, given the demonstrated variance among the different types of anti-abortion legislation, much opportunity exists to investigate what types of legislation are most effective at reducing the number of abortions, which types of bills are considered harshest to women's rights and whether or not those two concepts are in conflict. Additional research could investigate the difference between legislation that falls into these categories and how the presence of women in state legislatures impacts the success or failure of policies deemed particularly assaultive to women's rights or especially successful at preventing abortions. As long as West's (2009) assessment that state legislatures are the primary arena for abortion policy remains accurate,

research into the relationship between different types of abortion legislation and factors such as the number of women in state legislatures remains particularly pertinent to the future of abortion policy, and thus in many ways the progress of the women's rights movement. Finally, given the strength of the results in Democratically controlled upper chambers, it would be worthwhile to look into the characteristics of such bodies and the women who comprise them to determine why women's presence was so strongly correlated to less anti-abortion legislation.

Appendix

Table A

Type	Frequency	Percent	Cumulative
Hos./Doc./Clinic Restrictions	74	10.63	10.63
Gestational limits	45	6.47	17.10
Partial birth	14	2.01	19.11
Consent	30	4.31	23.42
Funding	41	20.26	43.68
Conscience refusal	10	1.44	45.11
Counseling	1	0.14	45.26
Waiting period	7	1.01	46.26
Parental involvement	49	7.04	53.30
Personhood	42	6.03	59.34
Access to clinic	2	0.29	59.63
Abortion drugs	21	3.02	62.64
Reporting	11	1.58	64.22
Ultrasound/pregnancy test	25	3.59	67.82
License plate	18	2.59	70.40
Family planning	41	5.89	76.29
Education	13	1.87	78.16
Symbolic	25	3.59	81.75
Sex of child	10	1.44	83.19
Other	65	9.34	92.53
Positive	44	6.32	98.85
Protect mother exception	4	0.57	99.43
Coercion	4	0.57	100.00
Total	696	100.00	

Table B: Share of vote received by President Barack Obama in 2008 by state

State	Number of votes	Percentage of vote
Hawaii	325,871	0.7185
Vermont	219,262	0.6746
Rhode Island	296,571	0.6286
Delaware	255,459	0.6194
Illinois	3,419,348	0.6192
Maryland	1,629,467	0.6192
Massachusetts	1,904,097	0.618
California	8,274,473	0.6101
New York	4,645,332	0.608
Connecticut	997,772	0.6059
Maine	421,923	0.5771
Washington	1,750,848	0.5765
Michigan	2,872,579	0.5743
New Jersey	2,215,422	0.5727
New Mexico	472,422	0.5691
Oregon	1,037,291	0.5675
Wisconsin	1,677,211	0.5622
Nevada	533,736	0.5515
Pennsylvania	3,276,363	0.5449
New Hampshire	384,826	0.5413
Minnesota	1,573,354	0.5406
Iowa	828,940	0.5393
Colorado	1,288,633	0.5366
Virginia	1,959,532	0.5263
Ohio	2,940,044	0.515
Florida	4,282,074	0.5103
Indiana	1,374,039	0.4995
North Carolina	2,142,651	0.497
Missouri	1,441,911	0.4929
Montana	231,667	0.4725
Georgia	1,844,123	0.4699
Arizona	1,034,707	0.4512
South Carolina	862,449	0.449
South Dakota	170,924	0.4475
North Dakota	141,278	0.4462
Texas	3,528,633	0.4368
Mississippi	554,662	0.43
West Virginia	303,857	0.4259
Tennessee	1,087,437	0.4183
Kansas	514,765	0.4165
Nebraska	333,319	0.416
Kentucky	751,985	0.4117
Louisiana	782,989	0.3993
Arkansas	422,310	0.3886
Alabama	813,479	0.3874
Alaska	123,594	0.3789
Idaho	236,440	0.3609
Utah	327,670	0.3441
Oklahoma	502,496	0.3435
Wyoming	82,868	0.3254

Table C: States with a high number of women in lower chambers

Democratically controlled

California
Connecticut
Hawaii
Illinois
Maryland
Nevada
New Jersey
New Mexico
Rhode Island
Vermont
Washington

Republican controlled

Alaska
Arizona
Colorado
Georgia
Idaho
Iowa
Kansas
Maine
Michigan
Minnesota
Missouri
Montana
New Hampshire
North Carolina

Other

Oregon

* Nebraska's state legislature is unicameral and nonpartisan

** Oregon's lower chamber was equally split between Democrats and Republicans in 2011

Table D: States with a low number of women in lower chambers

Democratically controlled

Arkansas
Delaware
Kentucky
Massachusetts
Mississippi
New York
West Virginia

Republican controlled

Alabama
Florida
Indiana
Louisiana
North Dakota
Ohio
Oklahoma
Pennsylvania
South Carolina
South Dakota
Tennessee
Texas
Utah
Virginia
Wisconsin
Wyoming

* Nebraska's state legislature is unicameral and nonpartisan

Table E: States with a high number of women in upper chambers

Democratically controlled

Arkansas
California
Colorado
Connecticut
Delaware
Hawaii
Illinois
Louisiana
Maryland
Massachusetts
Nevada
New Mexico
Oregon
Rhode Island
Vermont
Washington

Republican controlled

Arizona
Florida
Idaho
Indiana
Kansas
Maine
Minnesota
New Hampshire

Ohio
Pennsylvania
Tennessee
Wisconsin

Other

Nebraska

* Nebraska's state legislature is unicameral and nonpartisan

Table F: States with a low number of women in lower chambers

Democratically controlled

Iowa
Mississippi
New Jersey
Virginia
West Virginia

Republican controlled

Alabama
Georgia
Kentucky
Michigan
Missouri
Montana
New York
North Carolina
North Dakota
Oklahoma
South Carolina
South Dakota
Texas
Utah
Wyoming

Other

Alaska

* Nebraska's state legislature is unicameral and nonpartisan

** Alaska's upper chamber was equally split between Democrats and Republicans in 2011

Table G: Women in state legislatures 2011

State	House Women	Total House	Share House	Senate Women	Total Senate	Share Senate	Women Legislators	Total Seats	Women Share
Alabama	14	105	0.133333333	5	35	0.142857143	19	140	0.136
Alaska	10	40	0.25	4	20	0.2	14	60	0.233
Arizona	20	60	0.333333333	11	30	0.366666667	31	90	0.344
Arkansas	22	100	0.22	8	35	0.228571429	30	135	0.222
California	22	80	0.275	12	40	0.3	34	120	0.283
Colorado	24	65	0.369230769	17	35	0.485714286	41	100	0.41
Connecticut	47	151	0.311258278	9	36	0.25	56	187	0.299
Delaware	9	41	0.219512195	7	21	0.333333333	16	62	0.258
Florida	27	120	0.225	14	40	0.35	41	160	0.256
Georgia	47	180	0.261111111	9	56	0.160714286	56	236	0.237
Hawaii	17	51	0.333333333	9	25	0.36	26	76	0.342
Idaho	19	70	0.271428571	9	35	0.257142857	28	105	0.267
Illinois	39	118	0.330508475	16	59	0.271186441	55	177	0.311
Indiana	21	100	0.21	11	50	0.22	32	150	0.213
Iowa	24	100	0.24	7	50	0.14	31	150	0.207
Kansas	33	125	0.264	12	40	0.3	45	165	0.273
Kentucky	19	100	0.19	6	38	0.157894737	25	138	0.181
Louisiana	15	105	0.142857143	8	39	0.205128205	23	144	0.16
Maine	47	151	0.311258278	8	35	0.228571429	55	186	0.296
Maryland	47	141	0.333333333	11	47	0.234042553	58	188	0.309
Massachusetts	37	160	0.23125	11	40	0.275	48	200	0.24
Michigan	27	110	0.245454545	4	38	0.105263158	31	148	0.209
Minnesota	44	134	0.328358209	20	67	0.298507463	64	201	0.318
Mississippi	21	122	0.172131148	5	52	0.096153846	26	174	0.149
Missouri	39	163	0.239263804	6	34	0.176470588	45	197	0.228
Montana	28	100	0.28	8	50	0.16	36	150	0.24
Nebraska	0	0	0	11	49	0.224489796	11	49	0.224
Nevada	12	42	0.285714286	6	21	0.285714286	18	63	0.286
New Hampshire	98	400	0.245	6	24	0.25	104	424	0.245
New Jersey	26	80	0.325	8	40	0.2	34	120	0.283
New Mexico	20	70	0.285714286	10	42	0.238095238	30	112	0.268
New York	34	150	0.226666667	11	62	0.177419355	45	212	0.212
North Carolina	32	120	0.266666667	6	50	0.12	38	170	0.224
North Dakota	15	94	0.159574468	6	47	0.127659574	21	141	0.149
Ohio	22	99	0.222222222	8	33	0.242424242	30	132	0.227
Oklahoma	15	101	0.148514851	4	48	0.083333333	19	149	0.128
Oregon	17	60	0.283333333	8	30	0.266666667	25	90	0.278
Pennsylvania	33	203	0.162561576	11	50	0.22	44	253	0.174

Rhode Island	19	75	0.253333333	10	38	0.263157895	29	113	0.257
South Carolina	16	124	0.129032258	0	46	0	16	170	0.094
South Dakota	14	70	0.2	7	35	0.2	21	105	0.2
Tennessee	17	99	0.171717172	7	33	0.212121212	24	132	0.182
Texas	32	150	0.213333333	6	31	0.193548387	38	181	0.21
Utah	13	75	0.173333333	5	29	0.172413793	18	104	0.173
Vermont	58	150	0.386666667	11	30	0.366666667	69	180	0.383
Virginia	19	100	0.19	8	40	0.2	27	140	0.193
Washington	29	98	0.295918367	18	49	0.367346939	47	147	0.32
West Virginia	22	100	0.22	2	34	0.058823529	24	134	0.179
Wisconsin	23	99	0.232323232	10	33	0.303030303	33	132	0.25
Wyoming	12	60	0.2	1	30	0.033333333	13	90	0.144
Total	1315	5411	0.243023471	429	1971	0.217656012	1744	7382	0.236

* Nebraska is unicameral, and for the purposes of this study was deemed an upper chamber

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