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# The University of Southern Mississippi 

# Gendered Speaking Patterns in Supreme Court Oral Arguments from 1981-2016 

by

Gillian Purser

A Thesis<br>Submitted to the Honors College of The University of Southern Mississippi in Partial Fulfillment of the Requirement for the Degree of Bachelor of Science in the Department of Political Science, International Development, and International Affairs

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#### Abstract

This research attempts to discover whether or not the Supreme Court of the United State is subject to implicit gender biases during oral argumentation, largely through examining speaking time and the number of questions each justice is able to ask during a case's oral argumentation period. While there is substantial research on gender's impact on communication and decision-making processes, as well as gender's impact on court decisions, most research stops before it gets to the Supreme Court of the United States. There are two main goals to this research: First, to determine whether or not women Justices are impacted by the ratio of men to women justices on the Court. Second, to determine whether or not women Supreme Court Justices speak more in cases dealing with sex-discrimination than they do in other cases. To accomplish these goals, the oral arguments of eleven different Supreme Court cases covering a variety of male-to-female justice ratios and case topics were analyzed. Each case was listened to and the number of questions asked by each justice was counted. Then, computer software was utilized to discover exactly how long each justice spent speaking. A linear regression was then performed to quantify results. Results were compared across time, gender, case topic, ideology, and years on the Court in an effort to discover any sort of relationship between gender and communication style of Supreme Court justices.


Key Words: Supreme Court, communication, oral arguments, gender, ideology, tenure, communication style

## Dedication

To my family: thank you for consistently supporting my academic endeavors and never allowing me to believe that a dream or goal is too big.

To my friends: thank you for encouraging me at every deadline. But most importantly, thank you for never complaining (to my face) about all the times I rambled on about the Supreme Court.

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## Table of Contents

List of Tables ..... viii
Chapter 1: Introduction ..... 1
Chapter 2: Literature Review ..... 6
Chapter 3: Methodology ..... 15
Chapter 4: Results ..... 21
Chapter 5: Conclusion. ..... 35
References ..... 39

## List of Tables

Table 1: Overview of Data ..... 22
Table 2: Speaking Patterns of Women Justices, Establishment Clause Cases ..... 23
Table 3: Speaking Patterns of Women Justices, Women's Issue Cases ..... 26
Table 4: Impacts on Average Percentage of Time Spoken ..... 28
Table 5: Impacts on Average Number of Questions Asked ..... 29
Table 6: Ratio 8:1 ..... 30
Table 7: Ratio 7:2. ..... 31
Table 8: Ratio 6:3 ..... 32
Table 9: Ratio 5:3 ..... 33

## Chapter 1: Introduction

The Supreme Court of the United States is one of the most influential institutions of American politics. Until 1981, the Court was made up entirely of men. Since 1981, there has continuously been at least one woman justice sitting on the Supreme Court (Cushman 2013, xix). However, the impact that the addition of women has brought to the oral argumentation portion of the Supreme Court has been given minimal research. Research on gendered communication and court decisions has largely been divided into two types: research that focuses solely on gendered communication itself (Karpowitz, Mendleberg, and Schaker 2012, Evans 2012), and research that focuses on how women judges impact lower courts (Moyer and Haire 2015, Walker and Barrow 1994, Songer, Davis and Haire 1994). This research extends to the Supreme Court itself only in a handful of studies (Jacobi and Schweers, 2017; Meinke and Scott 2007).

Based on the significance of the oral arguments on Supreme Court decisions (Ginsburg 1992; Johnson, Wahlbeck, and Spriggs 2006; Ringsmuth, Bryan, and Johnson 2013; Roberts 2006), it is important to discover whether or not the implicit biases attributed to gendered communication habits impacts the Court itself. According to Chief Justice John Roberts, the oral arguments of the Supreme Court are an extremely influential and important part of the decision-making process (Roberts 2005, 69-70). Oral arguments are the "organizing point" for the Supreme Court, as this is the point in time where they have their own questions about a particular case answered. Issues brought up in oral arguments are oftentimes the key voting issues that justices later discuss in conference (Roberts 2005, 70). Thus, the oral arguments and any speaking patterns that might impact them are an important research venture. The goal of this
particular research is twofold. The first is to examine the speaking patterns of male justices versus female justices in the oral argumentation portions of the Supreme Court of the United States as a way to pinpoint gender discrimination. The second is to to discover whether or not female justices differ from male justices in cases dealing with sexdiscrimination. In other words, this research will be examining whether or not there is a difference between how female justices approach sex-discrimination cases as compared to other cases.

## Background

When it comes to communication styles, men are more likely to be commanding and to use dominating tactics likes interruptions (Evans 2001, 6). Karpowitz, Mendelberg, and Schaker (2012) tested this claim by conducting a study that analyzed male versus female communication in decision-making scenarios. The authors found that when there is only one woman in a group of men, she is less likely to speak up, but as women are added to the group, they each become more likely to speak (Karpowitz, Mendleberg, and Schaker 2012, 538).

In the context of the Supreme Court, gender impacts more than just communication style. It also influences decisions themselves. According to Songer, Davis, and Haire, women judges are more likely than their male counterparts to side with a plaintiff who is alleging discrimination, probably because they are more likely to have been victims of discrimination themselves $(1994,429)$. Additionally, when a woman is present on the bench, her male peers are significantly more likely to side with the party alleging discrimination (Boyd, Epstein, and Martin 2010, 1). In summation, there are two main ways that gender could impact the Supreme Court: first through communication
styles during oral arguments, and second through the very presence of women justices during deliberation.

## Problem Statement

While there is substantial research on gender's impact on communication, as well as gender's impact on court decisions, there is far less research referencing the Supreme Court of the United States. There is some research about whether or not gendered communication itself is evident within the Supreme Court, but it is limited to specific phenomena in communication rather than an overarching examination of gender's impact over time (Choi, Gulati, Holman, and Posner 2011; Jacobi and Schweers 2017; Palmer 2011; Songer, Davis, and Haire 1994). The goal of this research is to connect the research on gendered communication to the research on court decisions. By analyzing the oral arguments of the Supreme Court beginning when a woman was first confirmed to the Supreme Court, it should become evident whether or not there is a gender disparity on the Court-that is, whether or not male justices overshadow their female counterparts during oral arguments. Additionally, this research should shed light on whether or not female Supreme Court Justices repeat the patterns of lower court female judges and empathize more with victims of discrimination than their male peers.

This research seeks to answer two research questions: First, is the Supreme Court itself susceptible to inherent gender bias by creating a forum in which women speak proportionately less than their male colleague? More specifically, in oral arguments are the number of questions asked by women justices impacted by the ratio of men to women justices on the Court? Second, do women Supreme Court Justices speak more in cases dealing with sex-discrimination? Expected results include that women Supreme Court

Justices are not as prone to gendered speaking patterns as suggested by the research of Karpowitz, Mendleberg, and Schaker (2012). However, it is also expected that the ratio of questions asked by women increases with the number of women on the court. Additionally, it is expected that results will indicate that women Supreme Court Justices will ask more questions in cases dealing with sex-discrimination, based on the fact that the women currently sitting on the Supreme Court have more than likely directly experienced sex-discrimination (Moyer and Haire 2015, 671-672), and based on the fact that women justices are already subject to some gender disparities when it comes to communication styles-women justices are more likely to be interrupted than their male counterparts (Jacobi and Schweers 2017).

## Overview of Methodology

In order to examine the impact of gender on Supreme Court oral arguments, the oral arguments of cases from various time intervals will be analyzed. Two cases-one each dealing with sex discrimination and the establishment clause-were randomly chosen from six different time periods of varying gender composition of the Supreme Court. Then, modeling the study of Karpowitz, Mendleberg, and Schaker (2012), the number of questions each justice asked was counted and compared to the total number of questions asked during the oral argumentation period of each case. The results were compared across time, gender, and case topic in an effort to discover any sort of relationship between gender and communication style of Supreme Court Justices. After results were gathered regarding questioning patterns of justices, the software Nvivo was used to code the transcript of each oral argument used in this research. Using this software produced an approximate percentage that each justice spoke per case, which was
then be compared to the number of questions each justice actually asked. When communication style is referenced in this paper, it refers to whether or not women will speak more when there are other women on the court-whether or not the male to female ratio of the Court impacts how much each justice speaks. By choosing cases of differing topics from the same time period and gender composition, it is possible to analyze whether or not women justices speak more during oral arguments in cases they empathize with more-that is, cases dealing with sex discrimination.

## Summary

The chapters that follow will illustrate a more detailed review of the literature to all relevant facets of my research. The literature review contains comprehensive information about both gendered communication habits, as well as both direct and indirect background regarding gender's influence on the Court. Additionally, the methodology section will illustrate exactly how the analysis of the Supreme Court bench will occur.

## Chapter II: Literature Review

The literature on gendered communication differences indicates clear distinctions between men and women (Evans 2001, Karpowitz, Mendleberg, and Schaker 2012). When it comes to style of communication, men are more likely to interrupt, and will usually speak more than women. In dealing with negotiations, women are more prone to give their adversary some benefit of the doubt. That is, they are more likely to listen to an argument that could alter their opinions during negotiation, while men tend to want thorough control over a conversation and use more intense language. While men gravitate towards command when asking questions, women request-so a man might directly state what he wants to occur and a woman might use words such as "please" and "if you don't mind". However, it is also noted that when individuals are explicitly trained to carry out a specific job, these gender communication differences disappear (Evans 2001, 157-161). Gendered speaking patterns have also been detected in political sectors of the United States: a study by Brescoll (2011) found that male Senators exhibit a strong positive relationship between power and volubility, but female Senators do not (Brescoll 2011, 633). In other words, male Senators tend to speak more on the Senate floor as their power rises; their female colleagues saw no such correlation (Brescoll 2011, 628-629).

Karpowitz, Mendleberg, and Schaker (2012) attempted to debunk the stereotype that men are more dominant in communication. Instead, they affirmed this stereotype and found that in deliberative situations men talk more than women. They conducted ninetyfour mock discussions with varying gender compositions in each group, and then looked at the proportion of time men spent talking versus women, and compared this proportion to the gender composition in each group. The authors looked at whether or not women
talked proportionally more when there were more women in the group, and whether or not men talked proportionally more when there was only one woman present. While men were on average more likely to talk than women, this gap was larger in groups composed primarily of men in which there were only one or two women. Even when both genders were given equal opportunity to speak up, men were more likely to take the opportunity. Women spoke proportionally more in all women groups, and when deciding under unanimous rule, the gap was the widest when women were in the majority (Karpowitz, Mendleberg, and Schaker 2012, 538-545).

The influence of gender on pivotal decision-making processes is not only seen in communication. When it comes to decision making on a court, Songer, Davis, and Haire (1994) theorize that the very gender of a judge can have an impact on the decision. After performing a study of two hundred random cases, they concluded that in obscenity and search and seizure cases, there was little to no relationship between the gender of the judge and the outcome. In cases dealing with employment discrimination, women judges were more likely to side with the alleged victim of discrimination. The authors speculated that women were more likely to have been discriminated against, and thus were more likely than men to empathize with alleged victims (Songer, Davis, and Haire 1994, 429). This conclusion held true as well in the research of Boyd, Epstein, and Martin (2010). After looking at sex discrimination suits that saw resolution in the federal courts during 1995 and 2002, the authors found that_when a party is alleging discrimination, the likelihood of that party seeing a favorable outcome decreases by about ten percentage points if the judge deciding the case is a male. Moreover, if there is a female judge on a panel, the men on the panel have a higher probability of deciding in favor of the rights
litigant (Boyd, Epstein, and Martin 2010, 1)._In other words, women are more likely than men to side with the plaintiff in discrimination cases, and a woman's presence on the bench makes a male judge more likely to decide in similar fashion. Thus, the conclusion is that more women judges on any type of court equates to decisions that strengthen legislation against discriminatory action. This theory is tested in Walker and Barrow's research (1994). They matched a male judge to each female judge appointed around the same time, from the same district, and of the same race (Walker and Barrow 1994, 602). There were several different results. First, men were more likely to support personal rights. Second, in criminal cases, female judges ruled in favor of the defense less than their male counterparts. Third, women support the defense in cases dealing with federal regulatory policies more than men (Walker and Barrow 1994, 607-614).

While there is an agreement that men and women tend to decide cases differently, there are other factors that impact the decision-making process. Meinke and Scott argue that after a large membership change in the makeup of the courts, justices are more likely to have their vote swayed. Specifically, the researchers looked at vote change by Supreme Court Justices in the case Mapp v Ohio (1961) and Miranda v Arizona (1966), and concluded that votes are more likely to be swayed when a recent change in bench membership has occurred, except for search and seizure cases (Meinke and Scott 2007, 925). It is worth noting, however, that neither of these landmark cases had women on the bench, so it is impossible to conclude whether or not the addition of a large membership change and women justices would have had any type of impact. The presence of women oftentimes alters the decision of the Court to be more lenient towards those alleging discrimination. In cases of sex-discrimination, even the presence of a single woman on
the bench is one of the best indications that a decision will be made in the favor of the woman filing (Palmer 2011, 237).

Expanding on previous research about this theory, Moyer and Haire (2015) studied why women judges on the federal appellate courts are more likely than men to side with plaintiffs in sex discrimination cases. By analyzing case decisions as well as the relationship between the judge's sex, law school graduation year, and decision, the research came to several conclusions. First, Moyer and Haire found that women are more likely to side with plaintiffs in sex discrimination cases if they graduated law school between 1954 and 1975-these women are considered trailblazers because of their attendance at law schools in times when society was still adhering to strict gender stereotypes (2015). Moreover, they pinned this relationship to women being more aware of discrimination when they were in law school. Next, they found that more recent law school graduates were less likely to be differentiated based on sex. By highlighting the fact that it was trailblazers who were perhaps more radical, the authors potentially proved that women and men are not inherently different in their decision-making process. Rather, the trailblazers were the first to attend law school, so they felt the implications of discrimination much more than recent women law school graduates, which could account for their heightened empathy towards an alleged victim of discrimination (Moyer and Haire 2015, 682-685).

The fact that women still remain a minority on the bench can be attributed to several factors. The number of female justices in the United States can largely be attributed to the actions of the Senate. While women are likely to be judicial nominees by presidents, the Senate is unlikely to confirm them. Asmussen (2011) tested this theory by
analyzing the likelihood of a woman or minority being nominated as the only judicial candidate versus the likelihood of a woman or minority being nominated when the other option is a white man. She concluded that "the larger the gridlock interval [the quantifiable distance between the leftmost and rightmost players], the more likely it is that a Republican president opts for a woman or minority nominee, but there is no effect for Democratic presidents (Asmussen 2011, 601)." She also found that Democrats have the same likelihood of nominating a woman or minority, regardless of congressional gridlock. Republicans, on the other hand, rarely opt for women or minorities when there is little gridlock. She drew the conclusion that if senators think a nominee will hinder his or her respective party's prominence, they will not be confirmed (Asmussen 2011, 601604). Another explanation for the disparity between male and female justices is known as the "eligibility pool" theory (Palmer 2001, 235). As women did not begin entering both legal education and the legal field until much later than men, it will inevitably take extra time for the increase in the number of women lawyers to be reflected as eligible judicial nominees (Palmer 2001, 235).

As this gap between male and female judges closes with the emergence of female lawyers who are not trailblazers, some researchers have studied whether or not male and female judges are equal on grounds of performance during decision-making. Prompted by a statement by Supreme Court Justice Sonia Sotomayor that women are better judges than men, Choi, Gulati, Holman, and Posner tested whether or not one sex was a better judge than the other. They theorized that opinion production, outside state citations, and co-partisan disagreement - the ability of a judge to disagree with a judge of the same political party-contributed to whether or not a judge was successful. They then looked
at four hundred nine judges and analyzed each of these factors. The authors accomplished this by utilizing a complex statistical analysis based on quantified data related to opinion writing, citations from outside authorities, and disagreement with fellow judges. The authors eventually concluded that there is little to no evidence that female judges underperform or out perform male judges $(2011,508)$. Moreover, women were found to be more independent in decision-making than men. This was determined based on data that pointed to women having a positive relationship to writing opinions that differ from the conventions of justices of the same political ideology (Choi, Gulati, Holman, and Posner 2011, 511). Even when women have weaker credentials-that is, less experience-they tend to perform on par with their male counterparts (Choi, Gulati, Holman, and Posner 2011, 526). Even though there is little evidence suggesting that female justices are less successful than male justices, female judges still tend to receive lower ratings and performance evaluations than male judges in the same position on both a state and federal level (1855). However, a survey by Fix and Johnson (2017) suggests that the public does not necessarily reflect these sentiments. When questioned on whether or not gender influences the decision of judges, respondents indicated that male trial judges and female appellate judges were likely to be influenced by his or her gender, while their counter-parts were not. Respondents did not seem to suggest women alone are subject to be influenced by their gender when decision-making (Fix and Johnson 2017, 1873). While the study by Fix and Johnson is one piece of research that is inherently limited as it was merely a study of undergraduate students (Fix and Johnson 2017, 1866) and did not include the Supreme Court, it could point to overall attitudes regarding gender biases in the court system.

When discussing the decision-making process of courts, especially the Supreme Court, it is important to turn to those that sit on the bench themselves. In a 1992 lecture, Supreme Court Justice Ruth Bader Ginsburg provided her own insight into experiences as a woman on both sides of the bench. She argued that opinion writing has negatively impacted the courts because they characterize the decision of the Supreme Court much more than they characterize any other court-federal, state, etc. Additionally, she said that opinion writing that gets too "spicy" casts a negative light on the court and only leads to more divisive politics (Ginsburg 1992, 1194). Chief Justice Roberts provided a similar perspective, only this time for oral arguments. He looked at court dockets from 1980 and 2002 and compared them to see how oral arguments had changed in a quantifiable manner over time-how many questions were asked, what they meant, etc. He concluded that there have been about the same amount of questions asked by justices in 1980 as compared to 2003. However, there have been fewer cases and more repeat litigators.

Oftentimes, oral arguments are the first time that justices hear how their fellow justices feel about a particular case, and thus they are extremely influential and important (Roberts 2005, 69). Oral arguments are persuasive in nature, meaning the words of both the attorneys and fellow justices have the potential to cause a justice to rethink his or her position on a particular case (Ringsmuth, Bryan, and Johnson 2013, 435). Research points to the fact that the language used during oral argumentation can indicate which side will win the case, further indicating the importance of oral arguments to the overall decision-making process of the Supreme Court: the person that is asked the most questions tends to be the person who does not win (Roberts 2005, 75). Additionally, if justices use "unpleasant language" while participating in oral arguments, the side
receiving the highest proportion of unpleasant language is more likely to lose (Black et al 2011, 579). Justice William Brennan Jr. and Chief Justice William Rehnquist have also spoken of the importance of oral arguments as a part of the decision-making process. Justice Rehnquist affirmed that oral arguments could have an impact on how a justice chooses to decide a case, while Justice Brennan stated that oral arguments shape the way he interprets cases (Johnson, Wahlbeck, and Spriggs 2006, 6).

While the research on gender bias dealing with Supreme Court arguments is slim, one significant study analyzed interruptions during oral argumentation. Jacobi and Schweers analyzed oral arguments from all terms in which female justices were on the Supreme Court bench, with an emphasis on differences in gender, ideology, and seniority when it came to the interruption of justices. In regards to gender, results indicated that women are not only much more likely to be interrupted than their male counter-parts, but also that it is much more likely for a man to be the interrupter than a woman (Jacobi and Schweers 2017, 1483). In other words, if another justice is interrupting a colleague during Supreme Court oral arguments, the justice doing the interrupting is most likely a male. Additionally, interruptions tend to happen between justices of different ideologies, while differences in interruption frequency based on seniority are small. The study also confirmed that scholarship related to gendered communication can be seen in Supreme Court oral arguments: "all four female justices have learned to change their speech patterns, transforming from a less assertive questioning style to a more direct, aggressive style that men typically use to avoid being interrupted as regularly" (Jacobi and Schweers 2017, 1386)._In other words, female justices change their speech patterns as they adjust to the environment of the court. As time goes on, a female justice will adjust her speech to
be more assertive, thus resulting in fewer interruptions. This particular study is extremely relevant to my research, as it directly proves the existence of some sort of gendered pattern when it comes to oral arguments on the United States Supreme Court. While this particular study does not reference the ratio of males to females, it does provide a basis for assuming that gender impacts a justice's speaking pattern.

Based on the current literature, there is a general consensus that gender is a factor that influences decision-making processes (Choi, Gulati, Holman, and Posner 2011; Jacobi and Schweers 2017; Meinke and Scott 2007; Songer, Davis, and Haire 1994). This impact could be in the form of communication, or through a decision itself because of implicit biases that males have as opposed to females. Currently, little research exists that examines whether these gendered speaking patterns appear at the Supreme Court. This, combined with the theory that women will be more empathetic to individuals alleging discrimination, is an important facet to investigate as the Supreme Court is directly responsible for multiple landmark issues regarding various civil and women's rights issues. Examining the oral arguments of the Supreme Court provides a way to test the presence of gendered language and bias.

## Chapter III: Methodology

There is substantial research surrounding both the impact of gender on communication and the impact of gender on court decisions. However, there is little research that looks at the two topics combined-that is, how gendered communication itself relates to court decisions. Moreover, the research surrounding court decisions usually leaves off before it arrives at the Supreme Court. Most research focuses on circuit or federal courts, and looks only at the decision itself, rather than written opinions or oral arguments. Utilizing past Supreme Court oral arguments as a tool, it is possible to analyze the impact (or lack there of) that the gender of a justice has on his or her questioning and communication habits.

Cases will be randomly chosen based on several different characteristics. First, a list of cases will be compiled based on the ratio of male to female justices sitting on the bench. There are six different time periods relating to the composition of the court. First, from 1981-1992, when the first woman Supreme Court Justice, Sandra Day O’Connor, sat as the only woman on the bench. Second, from 1993-2006, when Justice O'Connor and Justice Ruth Bader Ginsburg were both on the bench. When Justice O'Connor retired in 2006, Justice Ginsburg was the only woman on the Court until 2009, when Justice Sonya Sotomayor was appointed. Thus, there were again two women justices from 20092010. In 2010, a third woman justice, Elena Kagan, was appointed. Ginsburg, Sotomayor, and Kagan have all sat on the bench together since 2010 (Cushman 2013, xix). Additionally, it will be worth noting that the composition of the Court changed in 2016 with the death of Justice Antonin Scalia, causing the ratio of male to female justices to decrease from 6-3 to 5-3. The differences in ratio are critical to this research. When

Karpowitz, Mendleberg, and Schaker (2012) examined gendered speaking patterns in decision-making processes, they found that men are more likely to speak up in these situations than women. More importantly, they found that when the gap between men and women was widened (that is, when there are only one or two women compared to three or four men), women would speak even less than they usually would (Karpowitz, Mendleberg, and Schaker 2012, 539). Replicating this method of analyzing speaking patterns based on the gender ratio of the group is a way to discern whether or not the Supreme Court is subject to this same subtle discrimination.

Within each of these six time periods, a list of cases in two different subcategories will be compiled: cases dealing with sex-discrimination and cases that deal with establishment clause violations. This research uses the establishment clause cases as a control group because it fits into a well-defined category-like sex-discrimination-and there are an abundant amount of cases to choose from. If only one case dealing with sexdiscrimination or establishment clause occurred during a particular time period, then that case will be used. Random selections will be made via an online randomizer so there is no unintentional bias on the behalf of the researcher. It is important to draw a distinction between cases dealing with sex-discrimination and cases that do not. Based on the work of Songer, Davis, and Haire (1994), women are more likely than men to side with an alleged victim of discrimination. This was attributed to the fact that women are more likely to have faced discrimination, so they are able to empathize with the plaintiff in a way that males cannot (Songer, Davis, and Haire 1994, 429). Additionally, men are more likely to rule in favor of someone alleging that their rights have been violated if a woman sits beside them on the bench (Boyd, Epstein, and Martin 2010, 1). Based on this
research, it is plausible that this difference in decision-making could result in a similar difference based on how a justice will approach the oral arguments of a case, depending on what the case is about. Juxtaposing patterns of speech during discrimination cases to patterns of speech during establishment clause cases provides a means of analyzing the effects of gender on the Court. Ultimately, twelve cases will be randomly selected-two from each category in time, and one each of a discrimination case and an establishment clause case.

In order to analyze these cases, the speaking ratio of male to female justices will be identified. Next, oral arguments of each of the selected cases will be analyzed using Oyez, a digital law project at Illinois Institute of Technology Chicago-Kent College of Law. Oyez houses most of the recordings of the oral arguments of the Supreme Court since recordings have been allowed in 1955. In addition to providing recordings of oral arguments, Oyez provides detailed transcripts so it is always clear which justice is speaking. This concept of analyzing speaker ratio is based on an aforementioned study by Karpowitz, Mendleberg, and Schaker (2012). This study was a test of gender speaking ratio in decision-making processes. The goal of their study was to discover whether or not women speak less than men during deliberation, as well as whether or not the number of women as compared to men in a group has any impact on how likely women are to speak up. They tested both majority rule, meaning the decision being made only needed a majority to pass, and unanimous rule-when a decision must be agreed upon by the entire group. To test this, the authors randomly assigned forty-seven individuals to ninety groups of random gender composition. Then, the authors gave the group an issue to deliberate, and then timed how long each individual in the group spoke, and compared it
to the total time the group used to deliberate. With this information, the authors developed speaking ratios for men and women in groups of varying gender compositions. They found that women do tend to speak more than men during a deliberation scenario, but that when they are in the minority group-that is, there are far fewer women than men in the group-women tend to vocalize during deliberation much less. However, as their numbers increase in a group, women become more influential (Karpowitz, Mendleberg, and Schaker 2012, 536-538).

This method will be mirrored in this study. When listening to each oral argument, the number of questions that each individual justice asks will be counted, then divided by the total number of questions asked to get an accurate ratio of individual patterns versus patterns of the whole Court. The Karpowitz, Mendleberg, and Schaker (2012) study differs from this study in that this study will focus on the justices' questioning patterns. As there is no open discourse between the justices and they are instead questioning two attorneys, counting questions will result in a similar end. Because the justices use the oral arguments to figure out how the other justices are feeling about a particular case, and even attempt to persuade their peers toward their own position (Roberts 2005, 70), it is still relevant to apply the speaking ratio method used in that study. The methods will not be copied identically because counting seconds spoken and then creating a ratio would fail to account for the time the lawyers spent speaking, thus creating an inaccurate representation of speaking time on the part of the justices. However, in order to provide an additional level of review, the program Nvivo will also be used to analyze justices' speech patterns. Nvivo will code the oral arguments of each individual case transcript to find the exact percentage that each justice spoke during a particular case's oral
arguments. The percentage spoken by lawyers will be removed without impacting the data concerning the justices. Additionally, it will be possible to compare the percentage of time spoken to the number of questions asked by each justice. This will identify patterns concerning speech time and questioning-an example of these findings could be whether female justices speak at the same rate as their male counterparts, but ask fewer questions.

After counting how many questions each justice asks and comparing it to the total number of questions asked during the oral argument, the ratio of questions asked by male justices to female justices will be analyzed. This analysis will be based on both the makeup of the Court and the subject matter of the case at hand. The percentage of time spoken based on the data gathered from Nvivo will also be examined. With this data about questions asked and percentage of time spoken, according to Karpowitz, Mendleberg, and Schaker (2012), it will be possible to answer whether or not there is gender bias in the speaking patterns of the Supreme Court-that is, this research will be able to identify if men speak proportionately more (or less) than their female counterparts, or vice versa. Additionally, results will indicate whether or not women participate in oral arguments more when cases allege discrimination. After gathering all of the data, a linear regression will be performed. In addition to examining the relationship between the ratio of male to female justices and speaking patterns, the ideology of the justice and the number of years the justice has been on the court at the time of the case will also be analyzed for a relationship. As previous studies have stated that women are more likely to empathize with alleged victims of discrimination (Walker and Barrow 1994, Davis, Haire, and Songer 1994, Boyd, Epstein, and Martin 2010),
looking at whether or not women justices are more active during oral arguments in discrimination cases will be another indicator as to a potential bias in the court-that is, that women justices will side with the victim party more often than male justices.

The goal of this research is two-fold: first, to discover whether or not the theories of Karpowitz, Mendleberg, and Schaker (2012) hold true in a supposedly unbiased forum responsible for monumental decisions in the United States. Second, to analyze whether or not this bias extends itself depending on the topic at hand in the Court. By following the methods I have established, I should be able to accomplish each of these goals and answer both of the aforementioned questions.

## Summary

The Supreme Court of the United States has a far-reaching influence that has been studied immensely. However, the oral arguments behind these influential decisions have had little research, especially in dealing with the patterns behind these arguments. Additionally, substantial research exists pointing towards both gendered speaking habits that establish male dominance in decision-making processes and the tendency for women judges to side with alleged victims of discrimination. However, the aforementioned research has never been applied in the scope of the Supreme Court and their oral arguments. This research, based on the methods of Karpowitz, Mendleberg, and Schaker (2012), will be an effort to discover just how much gender impacts the oral arguments of the Supreme Court, as well as whether or not the theory that women tend to empathize with victims of discrimination extends to the Supreme Court.

## Chapter IV: Results

## Overview

Before discussing the results of the regressions performed, the data and some discrepancies will first be explained. Table 1 displays an overview of the raw data gathered during research. The eleven cases that were randomly chosen for review are listed in the first column. For the time period between 2009 and 2010, when Justice Ginsburg and Justice Sotomayor were the only women on the court, there was no case heard that fell into the 'women's issue' category, thus it was only possible to include data from an establishment clause case. The column labeled 'Avg F questions' displays the average number of questions asked by women justices in the specific case, while 'average F time \%' displays the average percentage of time that women spent talking in that particular case. The percentages in the last two columns are low because they are out of a total percentage of words spoken, including time spoken by lawyers, which was not relevant to my research and thus left out of the table of results. When the linear regression was performed, roughly ninety-seven data points were analyzed in an attempt to get as accurate results as possible. The data were divided up based on the justice, not by averages for each gender. In other words, the regressions did not analyze data about the average speaking patterns of men in each case. The regression instead analyzed raw data detailing information related to each individual justice for each case, and then drew conclusions about the patterns of all males and all females. In addition to the number of questions asked and percentage of time spoken by each justice per case, the justice's ideology and the number of years that he or she had been on the court at the time of the case was included. The ideology of the justice was determined based on InsideGov's

Supreme Court Database, and each justice was either assigned 'liberal' or 'conservative' based on their categorization. Additionally, it is worth noting that each of the cases from 1991 include Justice Clarence Thomas, who did not speak in any of the cases that were used in the research. This potentially impacted the results related to male justices. Finally, the period in which the ratio of male to female justices was the smallest (5:3) occurred following the death of Justice Scalia, but before the confirmation and participation of Justice Gorsuch. Cases were included from this brief point in time, as it is the closest to equal gender representation the Supreme Court has ever seen.

Table 1: Overview of Data

| Case | Category | Ratio <br> M:F | Avg F <br> questions | Avg M <br> questions | average F <br> time \% | average M <br> time \% |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Board of Education v Mergens (1990) | establishment | $8: 01$ | 8 | 10.25 | $2.05 \%$ | $3.72 \%$ |
| Price Waterhouse v Hopkins (1989) | women's issue | $8: 01$ | 17 | 3 | $4.92 \%$ | $1.73 \%$ |
| Board of Education of Kryas Joel Village v |  |  |  |  |  |  |
| Grumet (1994) | establishment | $7: 02$ | 15 | 10.14 | $7.42 \%$ | $3.53 \%$ |
| Clinton v Jones (1997) | women's issue | $7: 02$ | 17.5 | 8.1 | $7.32 \%$ | $10.68 \%$ |
| Hein v Freedom From Religion Foundation (2007) | establishment | $8: 01$ | 7 | 9 | $5.16 \%$ | $4.80 \%$ |
| Ledbetter v Goodyear Tire and Rubber (2007) | women's issue | $8: 01$ | 19 | 7.1 | $9.82 \%$ | $3.11 \%$ |
| Christian Legal Society v Martinez (2010) | establishment | $7: 02$ | 10 | 10.6 | $4.63 \%$ | $5.50 \%$ |
| Hosanna-Tabor v EEOC (2011) | establishment | $6: 03$ | 8.3 | 10.3 | $4.83 \%$ | $6.32 \%$ |
| Burwell v Hobby Lobby (2014) | women's issue | $6: 03$ | 11 | 9.8 | $5.45 \%$ | $3.35 \%$ |
| Advocate Healthcare Network v Stapleton (2017) | establishment | $5: 03$ | 5.7 | 7.8 | $4.08 \%$ | $3.57 \%$ |
| Whole Women's Health v Hellerstedt (2016) | women's issue | $5: 03$ | 22 | 12.2 | $7.84 \%$ | $4.60 \%$ |

The overview of the data has a few relevant implications. First, in each of the cases classified as a 'women's issue,' the female justices asked more questions on average. Additionally, in four out of the five cases, the women justices spent more time speaking during oral arguments than their male counterparts. In establishment clause cases, women asked more questions in only one of the six cases, but spent more time speaking in half of the cases. In regards to the ratio of men to women on the court, there seems to be no clear pattern surrounding which gender is likely to speak more or ask more questions. Thus, preliminary results seem to show that the theories of Karpowitz, Mendleberg, and Schaker are not necessarily reflected in the data, as there is no distinct
speaking pattern that changes as the gap between male and female justices closes. However, the fact that no distinct speaking pattern exists reflects the research of Jacobi and Schweers. Jacobi and Schweers found that women justices tend to alter their speaking patterns to mirror the patterns of their male colleagues $(2017,1386)$. Thus, it is possible that the lack of patterns related to the ratio of men to women is simply because women have adjusted their speaking patterns so that no such pattern exists. The discussion of the results, which follows, breaks down the data by ratio and further explains whether or not any such phenomena exists.

## Speaking Patterns of Women Justices

Table 2 illustrates the speaking patterns of all women Supreme Court Justices in cases dealing with the establishment clause, while Table 3 reflects women's issue cases. These results can only be applied to the eleven cases examined in this research, and any results cannot necessarily be taken as true for all Supreme Court cases. The table is broken down so that every time there was a change in membership of the court, the change in speaking patterns is evident. Comparing the two tables, there are some obvious differences between patterns in the two different case types. Looking at the rows labeled 'Difference from Previous Ratio' provides the most information. First, in establishment

Table 2: Speaking Patterns of Women Justices, Establishment Clause Cases

|  | 1981-1992 | 1993-2006 |  | 2006-2009 | 2009-2010 |  | 2010-2016 (w/ Scalia) |  |  | 2016 (w/out Scalia) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | O'Connor | O'Connor | Ginsburg | Ginsburg | Ginsburg | Sotomayor | Ginsburg | Sotomayor | Kagan | Ginsburg | Sotomayor | Kagan |
| $\begin{array}{r} \text { \# Questions } \\ \text { Asked } \end{array}$ | 8 | 14 | 16 | 7 | 8 | 12 | 7 | 10 | 8 | 4 | 8 | 5 |
| $\begin{array}{r} \hline \text { Difference from } \\ \text { Previous Ratio } \end{array}$ | N/A | (+)6 | N/A | (-)9 | (+)1 | N/A | $(-) 1$ | $(-) 2$ | N/A | (-)3 | $(-) 2$ | (-)3 |
| \% Time Spoken | 2.05\% | 4.25\% | 10.59\% | 8.90\% | 4.23\% | 5.02\% | 6.73\% | 4.10\% | 3.67\% | 0.84\% | 1.62\% | 2.58\% |
| $\begin{array}{r} \hline \text { Difference from } \\ \text { Previous Ratio } \end{array}$ | N/A | ( + )2.2\% | N/A | $(-) 1.69 \%$ | (-) $4.67 \%$ | N/A | ( + ) $2.5 \%$ | $(-) 0.92 \%$ | N/A | (-)5.89 | $(-) 2.48$ | (-)1.09 |
| Avg Female Questions | 8 | 15 |  | 7 |  | 10 |  | 8.3 |  |  | 5.7 |  |
| $\begin{gathered} \hline \text { Avg Female \% } \\ \text { Time Spoken } \end{gathered}$ | 2.05\% | 7.42 |  | 8.90\% |  | .63\% |  | 4.83\% |  |  | 4.08\% |  |

clause cases, there is not a clear pattern of increases and decreases in the amount of questions asked by women justices, or in the percentage of time spoken by women justices. As evidenced by the table, while Justice O'Connor did speak more and ask more questions when Justice Ginsburg was appointed to the Supreme Court, Justice Ginsburg did not steadily speak more often as more women justices were appointed. When it was expected that Justice Ginsburg would speak the most-when there were a total of three women justices on the court-Justice Ginsburg actually saw decrease in questions asked. She also saw a decrease in percent of time spoken from 2009-2010 and in 2016 following the passing of Justice Scalia. One potential explanation of this is that the absence of such an aggressive communicator, like Justice Scalia, caused female justices to feel they did not have to ask as many questions directed at countering his arguments. Moreover, perhaps Justice Ginsburg sees a steady decline in speaking activity as more female justices appear on the court because she no longer feels that she bears the sole burden of representing women. Some evidence of this can be seen in Table 2 and Table 3. The smaller the ratio of males to females, the more likely male justices, not females, are to speak up.

Additionally, by looking to Table 2 in the row labeled 'Avg Female \% Time Spoken,' it is clear that the increase in female justices did not create an increase in the average time that each female justice spoke during oral arguments. Instead, there was the highest average percentage of time spoken when there was only one justice on the court (Justice Ginsburg in 2006-2009), with the average percentage every year after that seeing a steady decrease. This could be because, as more women were appointed to the court, veteran female justices felt that they did not need to speak as much as there were other
women present who could now share the load of questioning. However, when Justice O'Connor was alone on the court, she had the lowest average speaking time, which could be attributed to the particular case. In summation, Table 8 represents the theories of Karpowitz, Mendleberg, and Schaker only in the first three time intervals: the addition of Justice Ginsburg led to an increase in Justice O'Connor's activity, then the absence of Justice O'Connor saw a decrease in Justice Ginsburg's activity. When Justice Sotomayor was appointed, Justice Ginsburg saw an increase in activity. However, it is at that point that the pattern ends. Just because the ratio of men to women is smaller does not guarantee more women justices will speak. It should be remembered that oral arguments have a set time limit, and women justices are known to be less aggressive in their communication habits than their male counterparts (Evans 2001). One potential explanation for women asking fewer questions as more women justices are appointed is out of respect for their colleagues. While the Karpowitz, Mendleberg, and Schaker study illustrates some relevant patterns, it must be noted that their work does not directly replicate deliberation patterns that are stylistically similar to Supreme Court arguments. The individuals serving as the decision-makers are not professional colleagues, and they are not questioning any type of witness. Additionally, their study did not have a time limit to deliberation, only a minimum time that must be spent deliberating. Thus, the constraints of time were not a factor in their conclusions.

Table 3 depicts the speaking patterns of women justices in the five women's issue cases that this research analyzed. The column labeled '2009-2010' has N/A for each category as there was no women's issue case heard during that time interval. Unlike Table 2, Table 3 shows slightly more of a pattern when it comes to the speaking patterns

Table 3: Speaking Patterns of Women Justices, Women's Issue Cases

|  | 1981-1992 | 1993-2006 |  | 2006-2009 | 2009-2010 |  | 2010-2016 (w/ Scalia) |  |  | 2016 (w/out Scalia) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | O'Connor | O'Connor | Ginsburg | Ginsburg | Ginsburg | Sotomayor | Ginsburg | Sotomayor | Kagan | Ginsburg | Sotomayor | Kagan |
| \# Questions <br> Asked | 17 | 20 | 15 | 19 |  | N/A | 3 | 23 | 7 | 21 | 36 | 9 |
| Difference from <br> Previous Ratio | N/A | $(+) 3$ | N/A | (+)5 |  | N/A | (-)16 | N/A | N/A | $(+) 18$ | $(+) 13$ | $(+) 2$ |
| \% Time Spoken | 4.92\% | 7.44\% | 7.20\% | 27.50\% |  | N/A | 2.99\% | 6.00\% | 7.37\% | 8.24\% | 10.17\% | 5.12\% |
| Difference from <br> Previous Ratio | N/A | 2.52\% | N/A | 20.30\% |  | N/A | (-)24.51\% | N/A | N/A | (+) $5.25 \%$ | (+)4.17\% | (-)2.25\% |
| Avg Female <br> Questions | 17 | 17 |  | 19 |  | N/A |  | 11 |  |  | 22 |  |
| $\begin{array}{r} \text { Avg Female } \% \\ \text { Time Spoken } \\ \hline \end{array}$ | 4.92\% | 7.3 |  | 27.50\% |  | N/A |  | 5.45\% |  |  | 7.84\% |  |

of women justices. As depicted by the table, the addition of Justice Ginsburg to the court in 1993 saw an increase in the speaking activity of Justice O'Connor, and an overall increase in the average speaking activity of women justices. However, when Justice Ginsburg was alone on the court, she talked considerably more than when she was on the court with Justice O'Connor. This increase in Justice Ginsburg's activity occurred in both types of cases examined, potentially meaning that she is an anomaly when it comes to female communication patterns on the court-the fewer the women on the court, the more often she tends to speak. Her speaking patterns could be attributed to the fact that more women justices cause her to feel as though she does not have the burden of asking enough questions to compensate for the absence of other female justices. Aside from 2009-2010, the highest average speaking activity for women justices occurred in 2016, when the ratio of male to female justices was 5:3. This is in line with the theories of Karpowitz, Mendleberg, and Schaker, however as there was no data available for 20092010, it is not possible to definitively state that there is a pattern in cases dealing with women's issues. It is clear from Table 2 and Table 3 that women justices, on average, speak more often when the case is a women's issue case rather than an establishment clause case. In order to properly account for any sort of distinct speaking pattern for women justices, more cases should be analyzed.

## Explanation of Regressions

Tables 4-9 in the results illustrate a linear regression. Each of the variables being tested for evidence of a relationship was quantified. To quantify the ratio of $\mathrm{M}: \mathrm{F}$, decimals of each ratio were used. The ratio of $8: 1$ was given the value of $8 ; 7: 2$ was given the value of $3.5 ; 6: 3$ was given the value of $2 ; 5: 3$ was given the value of 1.67 . For the gender of the justice ( M or F ), if the justice was a male a 0 was assigned, while a 1 was assigned for females. For 'case,' a 0 was assigned to establishment clauses cases and a 1 was assigned to women's issue cases. Similarly in the 'ideology' variable, a 0 was assigned for conservative, while a 1 was assigned for liberal. Three asterisks ( ${ }^{* * *)}$ denotes the highest statistical significance, while two asterisks (**) denotes some level of statistical significance. The existence of any asterisks indicates that the variable in question has a definite relationship to the category being tested.

## Impacts on Speaking Activity

Table 4 illustrates the factors that were tested as potentially impactful on the average time each justice spent speaking. The factors tested are the ratio of male to female justices, the gender of the justices, the type of case, the ideology of the justice, and the number of years the justice had served on the court at the time of the case. The average time spoken for males and females was separated in order to determine if a difference between genders exists. As indicated by the asterisks, only one variable was statistically significant for each gender. When it comes to male justices, the ratio of males to females was statistically significant in its relationship to the amount of time a male justice will speak. There is a significant negative relationship between the ratio of males to females and the average time a male justice will speak, meaning that in the cases

Table 4: Impacts on Average Percentage of Time Spoken

| Average Percentage of Time Spoken |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male Justices |  |  |  | Female Justices |  |  |  |
|  | Estimate | Std Error |  |  | Estimate | Std Error |  |
| Ratio M:F | -0.30722 | 0.06551 | *** | Ratio M:F | -0.002694 | 0.058799 |  |
| M or F | 0.12647 | 0.48911 |  | M or F | 0.256183 | 0.439586 |  |
| Case | -0.15482 | 0.33714 |  | Case | 3.08821 | 0.302597 | *** |
| Ideology | 0.15981 | 0.42285 |  | Ideology | -0.182362 | 0.379523 |  |
| Years | 0.01293 | 0.01885 |  | Years | 0.014987 | 0.016917 |  |

analyzed for this study, the smaller the ratio between males and females, the more time a male justice spent speaking. While a negative number also exists in the ratio row for female justices, this number is extremely small and not significant enough to show any type of relationship. However, when it came to case type, there was an extremely significant positive relationship between the type of case and the amount of time a female justice spent talking during oral arguments. A woman justice was significantly more likely to speak up during a case related to a woman's issue, while a male justice was slightly more likely to speak during an establishment clause case. This pattern is also evident in Table 2 and Table 3, where women justices see an increase in average speaking activity when the case is a woman's issue rather than an establishment clause case. For the remaining categories, there was no statistical significance, and any relationship was not substantial enough to be definitive.

The same linear regression was performed in Table 5, but used the average number of questions asked by each justice as the dependent variable. By analyzing the average number of questions asked and the amount of time spoken separately, there is additional support for any statistically significant variables. Table 5 shows similar relationships to Table 4 in that the significant variables are ratio and case type. Similar to Table 4, there is a statistically significant relationship between the ratio of males to
female justices and the average number of questions asked by a male justice. The smaller the ratio of men to women, the more questions a male justice asked. The gender of the justice alone did not provide any statistical significance, but the type of case in question did. For male justices, more questions were asked in cases dealing with establishment clause issues, while female justices asked more questions in cases dealing with women's issues. Both Table 4 and Table 5 show an extremely high relationship between the type of case and the participation of the female justice, further solidifying previous research that women have different attitudes in cases dealing with discrimination and other women's issues (Moyer and Haire 2015; Walker and Barrow 1994). The existence of a relationship both in amount of time spoken and number of questions asked further solidifies its importance.

Table 5: Impacts on Average Number of Questions Asked

| Average Number of Questions Asked |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male Justices |  |  |  | Female Justices |  |  |  |
|  | Estimate | Std Error |  |  | Estimate | Std Error |  |
| Ratio M:F | -0.39651 | 0.08536 | *** | Ratio M:F | -0.03234 | 0.1319 |  |
| M or F | 0.16173 | 0.63741 |  | M or F | 0.07097 | 0.98608 |  |
| Case | -1.48329 | 0.43877 | ** | Case | 8.15954 | 0.67878 | *** |
| Ideology | -0.19458 | 0.55032 |  | Ideology | -0.9386 | 0.85135 |  |
| Years | 0.01636 | 0.02453 |  | Years | -0.03599 | 0.03795 |  |

However, there are also some differences between the two tables. In Table 4, ideology has a small positive relationship for men and a small negative relationship for women, meaning liberal men and conservative women were slightly more likely to spend more time speaking. In Table 5, both relationships are slightly negative. This discrepancy could be because male justices might take more time to ask a question or make more statements than women, but further research would need to be done to solidify this theory. Additionally, a similar pattern exists in the relationship between years on the
court. A negative relationship exists in Table 5 for women, but all other relationships are positive. However, the relationships that exist are so small, that no definitive conclusion can be drawn as to whether or not they are significant enough to impact communication patterns. It is also worth noting that the results in Table 4 and Table 5 do not follow the results of Karpowitz, Mendleberg, and Schaker (2012). While they concluded that the ratio of men to women in deliberative situations was impactful to the time women spent speaking, these results indicate that the ratio is only a significant factor for men. While there is a negative relationship for women, it is much larger for men, meaning that men's communication patterns are most impacted by the ratio of men to women when the ratio is closer to equal. To further analyze the impact of ratio of men to women justices on justices' speaking patterns, data were divided up based on ratio and four additional linear regressions were performed.

## Impact of Ratios on Speaking Activity

Table 6 illustrates a regression performed on data points for the four cases analyzed in which the ratio of men to women was $8: 1$. The regression was performed on thirty-six lines of data, one for each justice during each case. The dependent variable for

## Table 6: Ratio 8:1

| Number of <br> Questions Asked, <br> Ratio 8:1 |  |  |
| :--- | ---: | ---: |
|  | Estimate | Std Error |
| M or F | 5.726 | 2.6994 |
| Case Type | -3.3541 | 2.5102 |
| Ideology | -1.9297 | 2.848 |
| Years on Court | -0.1526 | 0.1346 |

this regression was the average number of questions asked by a particular justice. Thus, any relationship that exists would illustrate factors that increase or decrease the likelihood
of a justice asking questions. As evident in Table 6, none of the variables tested for a relationship were found to be statistically significant. The lack of statistically significant variables points to the fact that in order to successfully draw conclusions based on the ratio of males to females, more cases need to be analyzed. It is worth noting, however, that in the cases in which a ratio of $8: 1$ existed, the singular female justice was more likely to ask questions, as evidenced by the high positive number in the ' M or F ' column. Additionally, ideology, case type, and years on the court all had a negative relationship. This means that when the ratio of males to females was $8: 1$, conservative justices, and justices who had fewer years on the court were more likely to ask questions. A negative relationship for case type means that more questions were asked overall in establishment clause cases. However, because so few data points were used, these relationships cannot be assumed to exist outside of the cases used in this study. More cases would have to be analyzed in order to prove the existence of a relationship.

Table 7 illustrates significant factors when the ratio of male to female justices is 7:2. This occurred in three of the cases analyzed, resulting in twenty-seven data points.

## Table 7: Ratio 7:2

| Number of Questions Asked, <br> Ratio 7:2 |  |  |  |  |
| :--- | ---: | ---: | :---: | :---: |
|  | Estimate |  |  | Std Error |
| M or F | 5.447 | 3.951 |  |  |
| Case Type | -0.8191 | 2.8664 |  |  |
| Ideology | -2.7216 | 4.0726 |  |  |
| Years on Court | -0.1337 | 0.1602 |  |  |

Similar to Table 6, because of the small amount of data available for analysis, none of the relationships are deemed to be statistically significant. While clear relationships seem to
exist, none of them can be definitively stated as significant as simply not enough data points were available. It appears that when the ratio is $7: 2$, women are again more likely to ask questions. Just as in Table 6, a negative relationship exists for case type, ideology, and years on the court, although the relationships are much smaller than those that appeared when the ratio was $8: 1$.

Table 8: Ratio 6:3

| Number of Questions Asked, <br> Ratio 6:3 |  |  |
| :--- | ---: | ---: |
|  | Estimate | Std Error |
| M or F | -1.4413 | 5.7121 |
| Case Type | 1.8921 | 3.5788 |
| Ideology | -4.0984 | 4.9784 |
| Years on Court | -0.3986 | 0.2408 |

Table 8 details the regression when the ratio was 6 male justices to 3 female justices. This occurred in two of the cases, resulting in eighteen data points. Unsurprisingly, none of the relationships could be deemed statistically significant. However, it is still worth noting that the relationships illustrated in Table 8 differ from those of Table 6 and Table 7. When the ratio of justices was $6: 3$, it was men who were more likely to ask questions. Similarly to Table 6 and Table 7, ideology and years on the court had a negative relationship, but case type saw a positive one: when the ratio was smaller, more questions were asked in cases dealing with women's issues. This could potentially be because women are more likely to ask questions in women's issue cases, and thus the number of women on the court with an increased likelihood of asking questions caused an increase in the significance of the case type. However, it was the case type, not the gender of the justice, that was most impactful to the number of questions asked in this particular regression. Because there were only two cases analyzed,

Table 8 proves no real relationship, and any conclusions based on it would merely be speculation.

## Table 9: Ratio 5:3

| Number of Questions Asked, <br> Ratio 5:3 |  |  |
| :--- | ---: | ---: |
|  | Estimate | Std Error |
| M or F | -1.7981 | 7.2255 |
| Case Type | 9.1654 | 7.2255 |
| Ideology | 7.535 | 6.7963 |
| Years on Court | -0.2631 | 0.2622 |

Finally, Table 9 illustrates the regression for the ratio of 5:3. In this instance, two cases were analyzed, but because there were only eight justices participating in deliberation, sixteen data points were available. Thus, Table 9 is the least dependable data when it comes to drawing any sort of relationship. As the three tables before, none of the relationships are statistically significant. Additionally, the smaller ratio lends itself to a relationship in which males are more likely to ask questions, and cases involving women's issues were more likely to generate questions. However, ideology had a positive relationship in this particular case, with liberal justices asking more questions than conservative justices. However, this could simply be because of the makeup of this particular case. The court was essentially down two conservative justices, with the passing of Justice Scalia and the silence of Justice Thomas, leaving more liberal justices than conservatives.

## Summary

The results of this research are unable to provide conclusive evidence as to the importance of the ratio of men to women in impacting the speaking patterns of Supreme Court Justices. While clear patterns are illustrated in Table 1, Table 4, and Table 5, in
order to draw definitive conclusions, more cases should be analyzed. However, the research does allude to the fact that women justices are more likely to both spend more time talking and ask more questions in women's issues cases as compared to others, specifically establishment clause cases, as evidenced in Table 2 and Table 3. In order to solidify this, cases of varying topics should be tested against women's issues cases to ensure that establishment clause cases are not an anomaly. Moreover, this research seems to suggest that the methods of Karpowitz, Mendleberg, and Schaker (2012) are not necessarily reflected in the deliberation patterns of the Supreme Court. When the ratio of male to female justices closes, it is male justices, not females, who tended to speak more and ask more questions. Expanding this research to include a higher volume of cases would help to explain this phenomenon, as well as solidify the aforementioned results.

## Chapter V: Conclusion

## Overview of Research Goals

The goal of this research was two-fold. The first goal was to discover if the ratio of male to female justices had any impact on speaking patterns of Supreme Court Justices. The second goal was to analyze speaking patterns of female justices in women's issue cases and compare them to establishment clause cases to see if women justices change their patterns in cases inherently related to women. There is significant research relating to both of these questions. Karpowitz, Mendleberg, and Schaker suggested that the ratio of men to women in deliberative situations was significant in shaping the communication patterns of participants (2012). This particular research found that the more women who were present in a deliberative situation, the more time each woman tended to spend speaking (Karpowitz, Mendleberg, and Schaker 2012, 538). Other research exists suggesting that women tend to be less aggressive in their speaking habits (Evans 2001). Some of these gendered patterns are evidenced in deliberative situations that occur in the United States Supreme Court, as women justices are more likely to be interrupted than their male colleagues (Jacobi and Schweers 2017). As Supreme Court oral arguments are extremely crucial to the decision making process for Supreme Court Justices, it is important for this research to identify factors that may influence the way that justices communicate during oral arguments (Johnson, Washlbeck, and Spriggs 2006; Roberts 2005). When it comes to the impact that gender has on a justice's deliberation patterns, Boyd, Epstein, and Martin stated that women judges are more likely to side with individuals alleging discrimination (2010). The presence of a woman on the bench increases the likelihood of a win for a woman alleging discrimination (Palmer
2011). Utilizing the results of this research, it was theorized that the ratio of women to men on the Supreme Court would impact the speaking patterns of justices, with women potentially speaking more often if there were more women on the court. Additionally, it was theorized that women would participate more vocally in oral arguments if the case being discussed was one that was classified as a woman's issue.

## Overview of Results

The results of this research had some important implications. First, when it comes to the ratio of male to female justices, it seems that male justices are the ones most impacted. As evidenced by Table 4 and Table 5, the ratio of men to women is a significant factor when determining how often a male justice will ask questions. The smaller the ratio, the more questions a male justice asked. This is counter to the hypothesis, and counter to the results of Karpowitz, Mendleberg, and Schaker. It appears to be men, not women, who speak more often as the ratio narrows. Individual regressions were performed within each composition of justices on the court in an effort to discover any factors that disproportionately impact speaking patterns when the ratio of men to women changes. This research was unable to pinpoint any significant factors that differed based on the specific ratio of men to women on the court. While the data suggests that both case type and gender of the justice have an impact on speaking patterns, the results were not statistically significant. Had more cases been utilized, causal relationships could have been identified. Additionally, case type is a significant factor impacting women justice's speaking patterns. If the case is a women's issue case, women justices speak more often, both individually and on average. The case types of establishment clause and women's issue do not seem to be a significant factor impacting the speaking patterns of
male justices. However, limitations on the data utilized in this particular research prevent any definitive conclusions from being drawn.

There are several areas in which the findings of this particular research could be improved upon. First, more cases should be analyzed. In order to truly draw a conclusion about speaking patterns of Supreme Court Justices, more than two cases per each time interval should be reviewed. A small random sampling was utilized in this study in an attempt to provide an analysis that was representative of general communication patterns of justices, but utilizing a larger sample would have provided more definitive results. Continuing with the idea of random samplings but increasing the number of cases included in the research would provide more reliable results. Second, an expansion of case categories should be examined. In this research, establishment clauses cases were used as a control group to measure whether or not women justices spoke more in women's issue cases. However, utilizing only one type of case as a control leaves standing the possibility that the identity of the control group itself is significant. In other words, it is possible that establishment clause cases see different speaking patterns than other types of cases-free speech, free exercise, voting rights, etc. Comparing women's issue cases to a plethora of other case types would allow for more reliable conclusions to be made about the significance of case type. Additionally, new research should compare women's issue cases to other cases dealing with discrimination in order to see if the significant factor is discrimination itself or the existence of a woman alleging her rights have been violated. Finally, this research could be improved by including more independent variables in the regression. This study utilized ideology, gender, case type and years on the court as independent variables. To improve these particular categories,
ideology should have been expanded to include conservative, liberal, and moderate to account for justices who tend to be the swing vote and cannot always be categorized as strictly conservative or liberal. However, the addition of more independent variables could potentially account for significant factors not discovered in this research. For instance, factors such as race of the justice, age of the justice, number of years served as a judge before joining the court, whether the eventual decision was liberal or conservative, and seniority could be significant. Including a variable for whether or not the justice is the chief justice could also provide insight into speaking patterns.

## References

Asmussen, Nicole. 2011. "Female and Minority Judicial Nominees: President's Delight and Senators' Dismay?" Legislative Studies Quarterly 36(4): 591-619.

Black, Ryan C., Sarah A. Treul, Timothy R. Johnson, and Jerry Goldman. 2011. "Emotions, Oral Arguments, and Supreme Court Decision Making." The Journal of Politics 73(2): 572-581.

Brescoll, Victoria L. 2011. "Who Takes the Floor and Why: Gender, Power, and Volubility in Organizations." Administrative Science Quarterly 56(4): 622-641.

Boyd, Christina L., Lee Epstein, and Andrew D. Martin. 2010. "Untangling the Causal Effects of Sex on Judging." American Journal of Political Science 54(2): 389411.

Choi, Stephen J., Mitu Gulati, Mirya Holman, and Eric A. Posner. 2011. "Judging Women." Journal of Empirical Legal Studies 8(3): 504-532.

Cushman, Claire. 2013. The Supreme Court Justices: Illustrated Biographies, 1789-2012. $3^{\text {rd }}$ ed. Thousand Oaks, CA: CQ Press, an imprint of SAGE Publications.

Johnson, Timothy R, Paul Wahlbeck, and James Spriggs II. 2006. "The Influence of Oral Arguments on the U.S. Supreme Court." American Political Science Review 100(1): 99-113.

Evans, Michelle R. 2001. "Women and Mediation: Toward a Formulation of an Interdisciplinary Empirical Model to Determine Equity in Dispute Resolution." Ohio State Journal on Dispute Resolution 17(1).

Fix, Michael P. and Gbemende E. Johnson. 2017. "Public Perceptions of Gender Bias in the Decisions of Female State Court Judges." Vanderbilt Law Review 70(6): 1845-1886.

Ginsburg, Ruth Bader. 1992. "Speaking in a Judicial Voice." New York University Law Review 67(6): 1185-1209.

Jacobi, Tonja and Dylan Schweers. 2017. "Justice, Interrupted: The Effect of Gender, Ideology and Seniority at Supreme Court Oral Arguments." Virginia Law Review 103(October):1379-1485)

Karpowitz, Christopher F., Tali Mendleberg, and Lee Schaker. 2012. "Gender Inequality in Deliberative Participation." The American Political Science Review 106(3): 533-547.

Meinke, Scott R. and Kevin M. Scott. 2007. "Collegial Influence and Judicial Voting Change: The Effect of Membership Change on U.S. Supreme Court Justices." Law and Society Review 41(4): 909-938.

Moyer, Laura P. and Susan B. Haire. 2015. "Trailblazers and Those that Followed: Personal Experiences, Gender, and Judicial Empathy." Law and Society Review 49(3): 665-689.

Palmer, Barbara. 2011. "'To Do Justly': The Integration of Women into the American Judiciary." American Political Science Association 34(2): 235-239.

Ringsmuth, Eve M., Amanda C. Bryan, and Timothy R. Johnson. 2013. "Voting Fluidity and Oral Argument on the U.S. Supreme Court." Political Research Quarterly 66(2): 429-440.

Roberts, Jr., John G. 2005. "Oral Advocacy and the Re-emergence of a Supreme Court Bar." Journal of Supreme Court History 30(1): 68-81.

Songer, Donald R., Sue Davis, and Susan Haire. 1994. "A Reappraisal of Diversification in the Federal Courts: Gender Effects on the Court of Appeals." The Journal of Politics 56(2): 425-439.

Walker, Thomas G. and Deborah J. Barrow. 1994. "The Diversification of the Federal Branch: Policy and Process Ramifications." The Journal of Politics 47(2): 596617.

