A WOMAN IN A MAN'S WORLD: THE POLITICAL ATTITUDES OF WOMEN
AND THE ROLE OF REPRESENTATION

by

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ABSTRACT

ELIZABETH RENI WEMLINGER. A woman in a man's world: the political attitudes of women and the role of representation (Under the direction of DR. MARTHA E. KROPF)

Gender plays an important role in shaping attitudes, constraining roles, and perpetuating values. Historically women have been removed from the public and political environment, not allowed to vote, to freely work, and to attend educational institutions. Women's legal equality with men in most advanced societies has not eliminated the influence of gender, particularly in the political arena and the attitudes toward how women are supposed to act. Gender continues to influence how individuals form their own political and social attitudes. This dissertation explores how gender influences several different areas of public life with three distinct studies that each focus on the influence on gender. While each of the studies included in this dissertation is a separate and distinct study, each of them attempt to increase the knowledge regarding the role that gender has on attitudes and how diversity in different areas of society can influence attitudes of individuals. Do women have different attitudes toward policies than men, and what influence might these differences have on the political landscape and public policy in the United States? When women do become more integrated both in the workplace and also in political institutions what influence can this have on the structure and attitudes in the institution as well as in society in general?

DEDICATION

To my mother the kindest and wisest person I know.

ACKNOWLEDGMENTS

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LIST OF ABBREVIATIONS

ANES   American National Election Survey

HERI   Higher Education Research Institute

ISSP   International Social Survey Programme

STEM   Science, Technology, Engineering and Math

CHAPTER 1: INTRODUCTION

"There will never be a new world order until women are a part of it"

Alice Paul (1885 - 1977)

The entry of women into the public sphere with equal legal rights in society has been a fairly recent phenomenon in human history. Women have traditionally not been allowed into the same sphere of influence as men. Yet this slow entry of women into political and social positions, that they have normally been excluded from, has not come without a great deal of discussion and controversy. Much of this controversy has focused on what changes could occur in a society that provides women with the same rights and responsibilities as men. The study of women in politics therefore has followed some of these similar ideas concerning what influence women may have on society once they become part of the political sphere and the labor market. These studies have two significant bases; do women think differently than men and will there be significant changes in society if the traditional gender roles are no longer important.

The overarching research question of this dissertation is how does gender influence several different areas of public life, from attitudes toward particular policies to workplace interactions. Gender plays an important role in shaping attitudes, constraining roles, and perpetuating values. Historically women have been removed from the public and political environment, not allowed to vote, to freely work, and to attend educational

institutions. Women's legal equality with men in most advanced societies has not

eliminated the influence of gender, particularly in the political arena and the attitudes

toward how women are supposed to act. Gender continues to influence how individuals

form their own political and social attitudes. While each of these studies included in this

dissertation is a separate and distinct study, each of them attempt to increase the

knowledge regarding the role that gender has on attitudes and how diversity in different

areas of society can influence attitudes of individuals. The incorporation of women into

most sectors of society and the legal equality of women has not eliminated the role that

gender plays in the formation of attitudes and behavior of both men and women in

society. Virginia Sapiro (1983, p. 13) explains the perceived abnormality of women in

politics by noting

> Increasing involvement of women in political life has been blamed for the
> spread of a wide range of "social evils" at various times: dissolution of the
> family and society itself, communism, anarchy, juvenile delinquency,
> adultery, and worst of all, the loss of those exquisite feminine charms that
> make life so pleasant and intriguing. For a long time it was virtually
> impossible to view women's involvement in politics in a "normal" way; if
> women were considered an integral part of the political system, and if they
> were thought to have the same political roles and functions as their male
> counterparts, the situation was atypical or extraordinary, and therefore not
> normal.

This dissertation attempts to explore some of these perpetuating questions and ideas

regarding the impact that women will have on political and social life once they become

integrated into the political power structure and the labor market. Do women have

different attitudes toward policies than men, and what influence might these differences

have on the political landscape and public policy in the United States? When women do

become more integrated both in the workplace and also in political institutions what

influence can this have on the structure and attitudes in the institution as well as in society in general? When women become a normal part of the social structure, seen no differently than men, how will this representation influence ideas toward equality and change the stereotypical views about women? Can increasing diversity lead to the reversal of Sapiro's (1983) reflections and transform attitudes that observe women's integration into political life as leading to "social benefits" instead of "social evils?"

Attitudes, Diversity, and Furthering Equality

The first study in this dissertation examines the influence of gender on attitudes toward equality and the use of violence. This study comprises an analysis of whether gender influences individual attitudes toward the use of torture as an interrogation method for potential terror suspects. The second article focuses on another important aspect of the study of gender and politics: the role that institutional diversity has on moderating the attitudes toward women in an institution. This study focuses on whether increasing the representation of women in a university department increases a positive climate toward women in that department. The last article ties together the themes of the two previous articles to analyze whether diversity in political leadership at the national level influences attitudes of all individuals, specifically whether more diversity in the legislature increases attitudes that favor more equality toward women in society. In this analysis it is theorized that increased diversity in national government increases equality attitudes among men and women.

Gender and Approval of Torture

The role that gender plays in influencing political attitudes and political behavior has been analyzed in several ways. These differences in attitudes between men and

women, sometimes referred to as the gender gap, can translate into similar gender gaps in voting and in political participation. These differences in attitudes appear to occur at a young age (Fridkin and Kenney 2007) and can not only influence the way that a woman votes but also whether a woman candidate receives a vote (King and Matland 2003, Lawless 2004). The real differences in some women can influence political behavior and the perceived differences can influence behavior of others toward a candidate based on gender.

The first study in this dissertation investigates whether this gender gap in attitudes continues to be significant. Specifically this article analyzes whether there is a difference in attitudes between men and women in regard to the use of torture on terrorists suspects, what the Bush administration has called "enhanced interrogation techniques." While the gender gap appears to be a rather recent phenomena in US political history it has been researched in great detail. This gender gap has emerged in the political partisanship of women, who are more likely to be Democrat (Norrander 1997; Norrander 1999; Kaufmann and Petrocik 1999) and more likely to have liberal policy positions which is correlated in some ways to party membership (Norrander and Wilcox 2008; Cook and Wilcox 1991). While the results of the research show that this gender gap does seem to exist, the causes of this gap are somewhat contested. Some researchers attribute it to feminists (Conover 1988) others focus on the changing political ideology and partisanship of men (Norrander 1999). Overall there does appear to be a gender gap between men and women, albeit very small in some areas to much larger in others (Kaufmann 2006; Shapiro and Mahajan 1986). Shapiro and Mahajan (1986) find that "[t]he average gender differences in preferences toward policies dealing with the use of

force and violence have consistently been moderately large. Sex differences in opinion toward other policies have been approximately half the size" (p. 59). This issue of violence and force appears to be the issue that exhibits the most significant divide between men's and women's attitudes.

The analysis uses as the three focal independent variables whether the individual is female, a mother, and whether she is a feminist. There is expected to be a difference between men's and women's attitudes toward torture. There are two theorized directions that this difference could occur. The first is in the most widely accepted direction, and that is that women are less likely to oppose the use of torture because women have traditionally held attitudes that oppose the use of violence (Shapiro and Mahajan 1986). Some research has found that overall women are less violent than men, and show less support for the use of violence both internationally and domestically (Smith 1984, Wilcox, Hewitt and Allsop 1996). As is somewhat evident, the use of torture is an escalation of violence and women will not likely support this. However Conover (1988) makes the argument that women might be less likely to support torture due to feminist leanings which normally are more concerned with human rights and the human rights of unrepresented individuals. If this is the main causal factor in the gender gap, a gap between feminists and non-feminists is assumed, where feminists are less likely to support the use of torture yet non-feminist women are assumed to have the same attitudes as men.

The second hypothesized direction of this study is that women may actually be more supportive of the use of torture than men. This is theorized to be related to the emphasis on motherhood and a woman's responsibility to her children. Research has

shown that mothers are conditioned to believe that their primary purpose, role in society, is to take care of their children in a way that men are not socialized to have the same primary responsibility (Ruddick 1980). Women as mothers may use their role as mothers to legitimize to themselves the use of torture. If a woman believes that their child is at risk from terrorists they may support torture. The theory suggested here that the same woman who supports torture may at the same time oppose escalating a war. Women who are mothers might connect escalating a war to increasing the risk that their child might have to fight in the war, and would be unlikely to want to put their child at risk. A mother likely will not feel that escalating violence against terrorist suspects, by using torture, will have any direct influence on increasing risk for their children. Since terrorism is seen as an individual act torture will be seen as reducing the risk of a terrorist act when the individual is caught as well as their fellow terrorists. In contrast escalating violence against another country may be seen as increasing the risk of war, that could result in a draft. They might simply see torture as reducing the risk of violence against the US, and potentially their children, by gaining valuable knowledge to capture individual terrorists.

A final part of the analysis examines why individuals might respond to this question with an ambivalent response of "neither favor nor oppose the use of torture." Alvarez and Brehm (1995) found that ambivalent responses might be the reaction to conflict in an individual's core values. The study hypothesizes that mothers may feel ambivalence; as women they are socialized to oppose violence but as mothers they are socialized to protect their children from harm.

The data that is used for this analysis comes from the American National Election Study, 2008: Pre- and Post-Election Survey produced by the American National Election

Studies (ANES). This study allows for the analysis of individual attitudes toward torture.

This dataset has over 2000 individual surveys from 34 US states. Logistic regression is

used to analyze an individual's attitude concerning the use of torture as a technique used

to interrogate terror suspects.

Climate for Women: Attidues, Behavior and Women in the Workplace

While women's attitudes concerning politics and policy may be very different

from men's, women still must work and live in a society that for the most part has been

dominated by men. Women in many industries still feel a different climate than men do,

they feel like they are outsiders. This climate can be especially hostile in traditionally

male dominated fields (Hall and Sandler 1982). In academia there has been a continuing

study of how the university is hostile to women in many departments. Women in many

departments feel as though their work is not valued as much as men's, and that they are

treated as secretaries or wives and required to perform stereotypical female activities such

as taking notes in meetings or being the social director for the department (Hall and

Sandler 1982, Henehan and Sarkees 2009, Wu et al. 2002).

The second study in this dissertation focuses on how attitudes and behavior can

play an important role in women's success and ability to become equals in society. In this

study the connection between the representation of women in a university department and

the individual's feelings about the climate in that department is examined. The research

question for this article is; does an increased representation of women in a university

department increase women's feelings of a positive climate? The ability of women to

succeed in their work environment plays an important role in the further desegregation of

the job market in the US as well as women's position in society.

The research on climate for women and women in the workplace has been heavily influenced by the work of Rosabeth Kanter. Kanter (1977) argues in her study of an American corporation that this treatment of women as tokens is simply a result of their very low representation, as she explains women are the 'others' or the 'outsiders.' She points out that "the few of another type in a skewed group can appropriately be called 'tokens,' . . . they are often treated as representatives of their category, as symbols rather than individuals" (Kanter 1977, 208). Following Kanter's (1977) research, in departments with a higher representation of women there is expected to be warmer perceptions of climate from women in those departments than women in departments with a lower level of female representation.

Females in the workplace have changed or influenced the overall environment of the workplace in the US in several ways. The presence of women at all levels of business has caused there to be a focus on sexual discrimination or harassment in the workplace (Welsh 1999). Research has shown that many work environments, even in the educational system, which some might consider more sensitive to equality, have very negative climates for women (Faludi 2006, Hall and Sandler 1982, Monk-Tuner and Fogerty 2010). As several of the authors have discussed a critical mass of women should change the climate for women (Kanter 1977). That is, with more women holding typically male positions within an organization there should be a less negative climate for women. With women attaining these positions it is more difficult for women to be viewed as tokens and treated as representatives of their group. Women will likely be seen as individuals (Kanter 1977). If Kanter (1977) is correct, then increasing the

representation of women in all positions of an organization can change the environment toward women in that organization.

The data for this analysis comes from the Higher Education Research Institute (HERI) survey of more than 400 professors at the University of North Carolina at Charlotte in 2008. This survey covers many different topics related to job satisfaction, university environment, university services, and teaching methods. There are several questions from this survey that measure the perceived climate for women on campus. These questions specifically relate to the way that women feel their research and teaching are valued by the department, and also whether they feel like their values are congruent with those of the department.

Women in Power and Equality Attitudes

Women have been integrated into most areas of the labor force in the United States, and this labor force participation can have an important influence on many areas in society. In the political arena women have been incorporated into all levels of government at the local, state, and national level. These positions of power and influence that women hold can have implications on the way that individuals in society view women's proper roles and their perceived abilities. These women serve not only as important policymakers by holding these powerful positions, but they can also serve as role models in society. They can cause individuals to have a different view of women's roles. If a woman sees a female candidate she may feel more empowered to discuss politics as Atkeson (2003) found. Also, if a woman or young women sees more women in the national legislature she could be encouraged that politics is a legitimate role for women (Wolbrecht and Campbell 2007). Yet these works only marginally touch on the

broad influence that women in power, especially in the very visible national legislature, might have on the attitudes that individuals, both men and women, hold regarding the proper and accepted role of women in society.

The final article in this study focuses on the role that increasing women in national legislatures might have on the equality attitudes in society. These equality attitudes focus on whether individuals feel that women should be equal to men, particularly in relation to family life.

This study takes advantage of cross-national studies in order to explore this connection between women in political power and equality attitudes. Preceding research has studied the influence women in politics may have on women in the United States. Atkeson (2003) conducted a cross-state study, specifically looking at the role that women candidates might have in sparking women's interest in politics and cuing them that political interest is a legitimate interest for women. Wolbrecht and Campbell (2007) use cross-national surveys, yet they focus specifically on the role model influence that women in legislature might have on women in society. They explore whether female legislators might have an important influence on increasing the political interest of young women (Wolbrech and Campbell 2007). This position though as role models might not be as limited as their study suggests, the symbolic role that women in leadership have could be much more significant.

As women increase their political power and are much more visible on the national level as powerful politicians, particularly as national legislators, they might influence the equality attitudes in society. These women in power could transform the views and values of individuals in society. As Kanter (1977) theorized it might be quite

difficult to see women simply as stereotypical tokens of their group if they make up a large percentage of the group. Individuals in a society where women are highly represented might change their ideas concerning the ability of women to hold the same roles as men because they observe women serving in powerful governmental positions regularly. Individuals who live in countries with a higher representation of women are expected to have higher equality attitudes toward the role of women in society. They are expected to believe that women should have more equal roles in society, and less traditional ideas concerning the family roles of women.

The data used for this analysis come from the 2002 International Social Survey regarding changing gender roles. This survey was conducted in close to 40 countries and surveyed more than 40,000 respondents using random sampling to select the respondents. This dataset is used for the measure of equality attitudes as well as the control variables. The data used to construct the independent variable is from the Inter-Parliamentary Union, which provides data on the representation of women around the world. For this study the number of women in the lower house is used from the 30th of January 2001 (Inter-Parliamentary Union).

Women, Attitudes, and Public Policy

The purpose of these studies is to expand the knowledge regarding the differences between men and women in regard to their attitudes concerning public policy and the influence that diversity may have on equality attitudes in society. The roles that women take on could be severely limiting their ability to gain parity with men in many different arenas, both in terms of equality in the household which could be a function of equality attitudes in society as well as equality in the workplace. The further expansion of this

knowledge can play an important role in helping policy makers understand what sort of policies might be important to help achieve equality.

The role of public policy and the equality of women is especially important in regard to the last two studies. If women in power do in fact cause there to be increased equality attitudes among individuals in society public policies could play a larger role in encouraging women to reach these positions of power. A greater emphasis on programs and grants that encourage women and girls to be active in politics, such as the Running Start program and the Women's Campaign Forum could have important short term implications for the ability of women to have equal representation in government, but could also change these attitudes toward women that increased education and non-discrimination laws have not been able to change. Additionally this study could show increased support for the use of gender quotas in national legislative bodies. Quotas might very clearly be legitimized if there is this connection between women in power and attitudes toward equality.

In regard to the workplace there are definite policies that could be considered if a connection is found between women's critical mass and climate change. This connection has clear implications for women's role in the job market as well as the position of women in society. A connection between the presence of women in organizations and the climate toward women could encourage support for policies that help women gain access to male dominated fields through additional educational opportunities and mentorship. Policies that encourage women to stay in these male dominated fields and give them the ability to continue their family roles as well could further desegregate the job market. A job that has been traditionally male dominated could have demands that women are

unable to meet such as strict or long work hours. Changing these job requirements could further women's ability to stay in these jobs where they have the power to transform the workplace environment.

Each of these articles explores an important element of the study of gender and politics. With expanded knowledge on the roles that women have in society and the influence that expanding their roles might have, further public policies could be explored to break down some of the informal discrimination of women that still occurs in most societies around the world

CHAPTER 2: THE GENDER GAP AND TORTURE: OPPOSITION TO TORTURE AMONG MEN AND WOMEN IN THE UNITED STATES

The study of women in politics has included the analysis of both elite women and the masses in regard to their voting, political activity, and attitudes. Research of the past three decades has shown that women usually hold different political attitudes than men and vote slightly more to the Democratic side than men. This gender gap has been explored in relation to a number of attitudes, few studies have analyzed whether the gender gap is still evident in an issue area that women might be torn in two hypothesized directions The purpose of this study is to conduct an analysis of the gender gap in individual's attitudes toward the appropriateness of torture to prevent future terrorist attacks.

2.1 Introduction

The study of attitudes toward public policies includes the differences between the way that men and women support a particular policy or course of action. This difference between women and men since the 1980s in policy attitudes, partisanship and voting behavior is commonly referred to as the gender gap (see Conover 1988; Kaufmann 2006). The gender gap became substantial in the 1980's, reaching its high point in the 1996 election (Kaufmann 2006). The theory that men and women have very different beliefs about policies, and will vote in different ways in not new. This idea was used by some as evidence that allowing women to vote during the women's suffrage movement would lead to a more compassionate and moral government (Dubois 1987). This was only one argument, there were others that felt women would vote in ways that destroyed the traditional family (Keyssar 2001). Both views illustrate that women are thought to have different attitudes than men, and some evidence has been found to support this at some level.

The purpose of this research is to continue the previous research on the gender gap, and focus on the issue of torture. Attitudes toward torture have only recently been analyzed due to the fact that the US government has not, before the current "War on Terrorism" publicly condoned the use of torture as an interrogation method. This analysis measures whether there is a gender gap in the support of torture by specifically measuring individual's responses to "Do you FAVOR, OPPOSE, or NEITHER FAVOR NOR OPPOSE the U.S. government torturing people, who are suspected of being terrorists, to try to get information?". The issue of torture is an issue that might have several hypothesized outcomes in regard to the gender gap. Only a few previous studies have

looked at the female response to torture, with some mixed results depending on what type of torture is being considered (Haider-Markel and Vieux 2008) and the national political context (Eichenberg 2010). It could be presumed that women would be less likely to support torture due to their socialized attitudes against violence (Lott 1981; Valian 1999) or due to women's feminist leanings that promote more egalitarian perspectives (e.g., Conover, 1988). Previous research on the gender gap and foreign policy has focused on issues quite different than terrorism, usually war or some sort of protracted military intervention (Eichenberg 2003; Fite, Genest, and Wilcox 1990; Shapiro and Mahajan 1986; Wilcox, Hewitt and Allsop 1996), yet the current terrorist threat to the United States is quite different than previous foreign policy threats.

The issue of torture could also be seen as very different from other previous foreign policy issues, so there could be unexpected outcomes. The current threat of terrorist attacks is a more serious threat to the homes and children of Americans than the potential threat women felt when Saddam Hussein was in power; or the perceived threats from other states with which the US has had a conflict. The danger of terrorism that women, and especially mothers may feel could cause women to actually support the use of torture more than men do. Torture, unlike other foreign policy conflict issues, presumably poses no threat to Americans in the minds of most American citizens. [1]

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[1]Of course international norms encouraging or accepting the use of torture could have a long term negative impact on the state of human rights in the world yet most American will not think this far into the future and they likely will believe the only individuals that would suffer from this are foreign terrorists. In addition to this, most Americans likely would not feel that the way Americans treat terror suspects will have any relationship with the way that these suspects and their groups will behave. Thus, this possibility is not expected to affect the theory used in this analysis. That is, neither women nor men will expect there to be a correlation between the US using torture and terrorists becoming any more violent than they already are. Not only are these attitudes reasonable for individuals but elites use these type arguments to provide support for torture (Hooks and Mosher 2005).

This paper will attempt to analyze the gender gap in attitudes toward torture between men and women using the 2008 American National Election Survey. This analysis is based on the consistent gender gap found in previous studies, especially in regard to foreign policy issues. Yet this paper intends to go beyond the previous research on the gender gap by showing that with the issue of torture it is not easy to predict in what direction the gender gap will occur. In order to answer the questions, first in this paper, there is a literature review of the gender gap in attitudes among men and women. This literature review leads to hypotheses which will be tested herein. The hypotheses are tested with data concerning women's individual attitudes toward the appropriateness of torture on suspected terrorist suspects. The data will allow a test for whether there is a gender gap in attitudes toward torture, and in what direction this gender gap occurs.

2.2 Literature Review

Gender Gap

The gender gap is a somewhat recent phenomenon in the study of women in politics. While there likely have been the elements that created this gender gap before the 1980's the study of this difference between men's and women's political behavior is fairly contemporary (Kaufmann 2006; Norrander and Wilcox 2008). This gender gap has emerged in the political partisanship of women, who are more likely to identify with the Democratic Party (Norrander 1997; Norrander 1999; Kaufmann and Petrocik 1999) and more likely to have liberal policy positions which is correlated in some ways to party membership (Norrander and Wilcox 2008; Cook and Wilcox 1991). While the results of the research are not completely uniform there is a general trend in some areas such as partisanship and policy positions. Overall there does appear to be a gender gap between men and women, albeit very small in some areas to much larger in others (Kaufmann 2006; Shapiro and Mahajan 1986). Scholars such as Kaufmann argue that the gender gap reached a high point in 1996 and has been declining since then (Kaufmann 2006). Research has found a similar gender gap in political discussion, yet there seems to be very little change in this gap since the 1950's (Atkeson and Rapoport 2003). Atkeson and Rapoport 2003 find that women are less likely than men to engage in political discussion and that this gap has been fairly consistent since the 1950's. Several different factors, some demographic and others due to socialization, are hypothesized to cause the gender gap.

Theoretical Causes of the Gender Gap

There are several theories as to why there is a gender gap in the US, and why this gender gap has only relatively recently become evident. Some authors have pointed to the growing workforce participation of women, increased education as well as their decreasing marital rates, all of which increase the likelihood of a woman holding more liberal views (Norrander and Wilcox 2008). These though are somewhat practical demographic considerations, but beyond these demographic differences there are other reasons why researchers expect women to hold more liberal ideological views and policy positions.

Another explanation for this gender gap is that men and women may be socialized in very different ways to understand their role in politics. Thus, the difference in beliefs between men and women can be theorized as differences in socialization. A girl's beliefs about the appropriateness and usefulness of violence in her life will translate directly into her attitudes toward public policy. Lott (1981) discusses the role that socialization plays in forming women's behavior. She notes that "[s]ocialization may be defined as the process of learning those behaviors that are appropriate for members of a particular group distinguished from others on the basis of certain ascribed and/or achieved statuses" (p. 6). The socialization process that is argued to occur may seem somewhat vague, but it is the process by which all individuals learn what behavior is appropriate and what is not.

In regard to violence and aggression girls are taught that this is inappropriate. Even from a very young age girls are treated differently than boys, they are trained to be less aggressive and less confrontational (Lott 1981,Valian 1999). Socialization to be less aggressive can be supported by survey research showing that women in a host of situations feel that violence is inappropriate, at much higher rates than men (Smith 1984).

These attitudes could explain at least a part of this gender gap in policy beliefs. The process of this socialization occurs through the individual behaviors of people surrounding the child including parents, educators and other children. In this environment "[a]n aggressive girl will thus get a clear and unambiguous message: aggression is both wrong and decidedly unfeminine (Lott 1981, p. 49). While it is difficult to point to specific occurrences in each woman's life that will cause their behavior to be different than a male's behavior, there are consistent and constant differences that on average may cause there to be this divergence of attitudes between men and women.

The present research thus makes the argument that due to the negative consequences of aggression among women, women are less likely to be aggressive, not only in their behavior but also in their attitudes. It is of course plausible that an individual might be more aggressive in their attitudes than their behavior. However, if a person is taught that only a certain level of violence is acceptable for them, then they are unlikely to feel like they can condone a greater level of violence among others as even condoning violence is unacceptable for a female. While socialization is a process that occurs over many years, and can be individually quite different, it is argued that this process of differentiating rewards and punishments for aggression between male and female children results in women being much less likely to support aggression and violent behavior. Indeed, authors from a variety of fields have found evidence that women are less likely to condone violence and to participate in violence than men (Steffensmeier et al. 2005; Lauritsen, Heimer, and Lynch 2009).

Policy areas that might be particularly sensitive to differences in attitudes toward violence are foreign policy, defense policy, and domestic crime policy. Research has

confirmed many of these hypotheses; women are less likely than men to believe that the use of force is appropriate (Eichenberg 2003; Fite, Genest, and Wilcox 1990; Shapiro and Mahajan 1986; Wilcox, Hewitt and Allsop 1996). Conover and Shapiro (1993) found that while women did have significantly different attitudes than men in regard to questions about violence in hypothetical events and actual events, these differences were larger when the questions regarded concrete questions about the Gulf War in 1991 rather than the hypothetical situations.

A gender gap appears to exist as well in domestic issue areas, such as welfare and social security support. Shapiro and Mahajan (1986) found that in addition to the gender gap in regard to questions about force, there also existed a gender gap in domestic issues relating to welfare and regulation issues. While several authors have tried to explain this gender gap (Cook and Wilcox 1991; Conover 1988), or at least describe it in more detail (Wirls 1986) they have all found this somewhat persistent gender gap in domestic issues in addition to foreign policy issues.

Further this gender gap has been found to exist in other countries as well, with women less supportive of the use of force during the Gulf War (Wilcox, Hewitt and Allsop 1996) to the more liberal attitudes of women in Denmark (Togeby 1994). This provides some evidence that this gender gap may not be localized to the American political system, rather there could be quite clear differences between the way that all men and women view policies.

Some authors have even looked beyond individual attitudes toward policy to argue that states with more women in their national legislatures are less likely to escalate conflicts to war (Caprioli and Boyer 2001). Yet beyond the issue of violence there could

be much larger differences in the way that women perceive the world and the way that men do. Women may use different values to make decisions. They may evaluate the relationships they have and the impact that these decisions could have on these relationships when they are making decisions.

A possible explanation for a gender gap in attitudes toward violence is tied to Gilligan's (1982) different voice research. While Gilligan's (1982) conclusions come from studying a small number of individuals, she provides some insight into some of the ways with which women may deal with relationships and situations differently than men. Women, arguably through socialization, could simply see the world in a very different way than men. As Gilligan (1982) found in her research, women were more interested in relationships than men, and situated themselves within these relationships when making decisions. This could have a significant impact on the way that women think about a large set of public policy issues. Considering first how a public policy will influence those with whom the woman has a relationship could frame the way that most public policies are viewed by women from welfare policy to foreign policy. Given that foreign policy is typically less salient to most individuals however, one might not expect it to affect women directly. Like others, women may simply have undeveloped attitudes or those determined by partisan cues. By Gillian's logic, a woman whose relationship is directly touched by foreign policy (e.g., they or a family member is a member of the military) should be able to form an attitude because of the relationships in which they are situated.

Arguably, the relationship of the mother to the child is one of the most important. Ruddick (1980) discusses the important role that this "maternal thinking" plays in the

lives of mothers. She explains how important the role of motherhood is in guiding a

mother's thinking and behavior, she argues this role has a strong influence on women's

behavior and is quite different from the role that a father might have as a parent. Ruddick

points out that "[m]aternal practice is governed by (at least) three interests in satisfying

these demands for preservation, growth, and acceptability . . . . a mother typically

considers herself and is considered by others to be responsible for the maintenance of the

life of her child" (pp. 348). Seemingly, this important relationship guides decision-

making.

2.3 Theory and Hypothesis

Torture and the Gender Gap

A current and somewhat significant shift in US foreign policy in recent years is the "War on Terror" that was a response to the terrorist attacks on September 11th, 2001. This event has led to many seemingly unthinkable policies becoming acceptable such as permanent detention of prisoners and use of torture as an interrogation technique. Jackson (2007) discusses the use of language, particularly the dehumanizing of terror suspects, as a tactic to induce the public to accept these previously inappropriate policies, so that the public believes they are normal and necessary (Jackson 2007). However, there is quite a dearth of studies that actually analyze what factors might cause individuals in the US to accept torture as appropriate and needed. Haider-Markel and Vieux (2008) in analyzing specific types of torture found that the actual form of torture used did influence women's support. Women were found to be less supportive of almost any type of torture, and there was a strong effect of gender on the most extreme forms of torture, especially those that made the individual feel most vulnerable (Haider-Markel and Vieux 2008). Following the work begun by Haider-Markel and Vieux (2008) this study focuses on whether gender drives attitudes toward the appropriateness of torture overall as an interrogation technique for terror suspects. That is, is there a gender gap in attitudes toward torture?

Drawing from previous research, it is apparent that there are clear differences between the way that men and women approach policies that are connected to the use of force (Shapiro and Mahajan 1986; Wilcox, Hewitt and Allsop 1996; Wirls 1986). Torture

should not be any different from the use of force in many ways. If women are socialized

to act in less aggressive and more compassionate ways, then it is likely to assume that

women should be less likely to support torture, it being considered inhumane.[2] It may be

though, as Conover (1988) discussed, feminists that are driving this gender gap. Women

who are feminists have different political values than other women. This study will

follow the study of Conover (1988) and measure whether or not this feminist ideology

drives the gender gap in attitudes toward torture. If the argument of Conover (1988) is

considered, then a subset of women, feminists, who have awakened their 'women's

perspective' will likely not support torture due to their increased interest in egalitarianism

and belief in upholding every individual's civil rights. There is also another side of

women's roles as mothers than might actually encourage them to approve of torture as a

technique to be used to obtain information from terrorists.

An argument could be made that women might be more likely to approve of

torture, one that Jackson (2007) might point to as being reinforced by the language of the

elite in power. In this case, different from women's disagreement with the use of force,

women will be more likely to support torture, but only if they are mothers. Women may

feel that in order to uphold their responsibility as mothers they must protect their

children. This maternal 'instinct,' or role that women have been assigned, may convince

them that using these torture tactics during terrorist interrogations might be the only way

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[2] While it might be argued that biological differences could cause women to be less aggressive than men this study focuses on the socialized differences between men and women rather than this biological explanation. The importance of socialization has been consistently found by researchers to be important in behavior and attitudes concerning public policy. The connection between biological differences and public policy views has not been identified in research. It is difficult to ascertain, and to the knowledge of the author has not be researched, what specific biological differences might lead to differences in specific public policy stances. In addition to this any study of biological differences is still connected to socialization, biological differences cannot be studied void of socialization processes, and socialized differences are still an important part of the attitudes of individuals whether or not there are biological differences.

they can protect their children from future terrorist attacks. This directive to be responsible for the life of your child could play an important role in guiding a woman's political interests, especially in the case of terrorism where the threat might seem quite viable (e.g., Ruddick, 1980). As Stone (1999) discussed the public discourse and understanding of public policy can be very dependent on symbols and stories. The overwhelming "narrative" (Jackson 2007, p. 358) that was created by the government could be so strong that women choose to embrace their role as protectors over their attitudes concerning violence. As Jackson (2007) explains the story that was told about future terrorist attacks is so persuasive and immediate, to the point that the next terrorist attack could be so disastrous that it requires any means necessary to reduce the risk.

If women's historical reluctance to escalate violence is connected to a worry about how this escalation might lead to further violence, torture may be perceived as very different, with less negative consequences. Women may perceive their children as likely victims of a terrorist attack, rather than victims of torture. Stated differently women who are mothers may see no negative repercussions to using torture to help protect their children because this escalation of violence will not likely put their own children at risk. In consideration of wars women may have seen their children as likely soldiers required to fight these wars, and at risk of being harmed. Yet war is very different from the issue of torture because due to the political 'narrative' that is created torture is only used against terror suspects and there is no chance to believe that US soldiers or citizens will be victims of torture if the US condones this treatment. Additionally there is no escalation of violence, terrorists want to destroy American lives. From a very utilitarian view there is really only a winning side for Americans. Torture could save American lives, and put

no lives of soldiers or citizens as risk, as war does. While realistically a public policy that condones this behavior could change international norms which could likely put US soldiers and citizens at risk for this treatment in the future by other governments, likely most individuals will not consider this a valid possibility.

While it may seem obvious to some that women would be less likely to approve of torture than men, sufficient research has not been conducted to say this with any certainty, and the literature and theory indicate it is not obvious. From the logic of relationships, it is not clear what women might think about use of torture to prevent future acts of terrorism. Thus, the theory and literature point to an uncertainty about the difference between men and women, but definitely a difference. Thus, the hypothesis presented here is:

H1: Women will have significantly different attitudes than men regarding the use of torture as an interrogation technique for terror suspects

There are three important ideas to note here. First, support of torture on the part of women is expected to be from mothers. Further, if there is a gender gap it is only mothers that are influenced by their roles as mother, and not fathers. While some authors have found that men's behavior is influenced by their roles as fathers (Washington 2008) others argue differently (Ruddick 1980). This study sees a very unique relationship between women and motherhood that is not the same for men and fatherhood. While there obviously may be some differences on the individual level among men and their roles as fathers, it is argued that women see themselves primarily as mothers if they have children. This may be due to the way that society has socialized women to be primarily responsible for the reproductive functions of society. The argument of this research is that

men may be no less committed to their role as fathers, yet women internalize their role as

mothers to such a degree that they make primary decisions based on this role. Ruddick

(1980) discusses this influence of motherhood by noting the women are responsible for

the "preservation, growth, and acceptability" (p.348) of their children, and as such these

three goals motivate women's decisions and thinking. This role of motherhood is very

different than the role of parenthood, the role that men may feel. Ruddick explains this by

saying that "[i]t is because we are *daughters* that we early receive maternal love with

special attention to its implications for our bodies, our passions, and our ambitions"

(Ruddick 1980 p. 346). The entire socializing process of becoming a mother hardly

begins once the child is born, but is a continuing experience for women throughout their

lives.

The other issue of note is the gender of the child. If a mother has a son she might

be much more concerned about the likelihood that he may be a victim of a war or

international conflict than a daughter. The issue of torture and terrorist attacks though is

quite different than war, everyone is vulnerable to terrorist attacks not just individuals in

the military. The terrorist attacks of September 11th showed this vulnerability of the

whole population.[3] While this is an important consideration, unfortunately these data do

not allow for the measurement of the sex of the child, and what role this might play in

individual's attitudes.

Both of the previous hypotheses may be valid. Thus, this raises the possibility of

the cross-pressures faced by mothers, causing them to be less likely to give a response at

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[3] There is little empirical evidence that seems to be available on mothers with children of different genders. Washington (2008) showed that fathers with daughters acted in very different ways in regard to their political stances on certain issues than fathers with only sons. These differences though were related to issues that directly influence women's health and reproductive issues.

all; ambivalence results in the "don't know/neither favor nor oppose" response. For this analysis, descriptive statistics indicate that about 23% of respondents answer with a neither favor nor oppose response to the torture question. Several authors have pointed to cognitive dissonance causing this ambivalence toward certain issues. If an individual is faced with taking a policy position that may cause conflict with several of their values they may choose an ambivalent policy position because they are unable or unwilling to resolve this conflict (Alvarez and Brehm 1995). Alvarez and Brehm (1995) point out that "the most challenging questions for both political elites and mass publics occur when fundamental principles or values are conflictual" (Alvarez and Brehm 1995, p. 1055). Several scholars have found support for the idea that individuals may have a higher likelihood of answering in an ambivalent manner in response to a question that might cause conflict between these core beliefs (Alvarez and Brehm 1995, Feldman and Zaller 1992). Due to this hypothesized connection, and the very apparent conflict that support for torture might cause between core beliefs several interactions are included that attempt to ascertain whether many of the individuals that do answer in this ambivalent manner might be experiencing value conflict. It is important to analyze this relationship due to the cross-pressures that could occur for mothers. As a mother a woman feels like their primary responsibility is to protect their child and yet a woman is socialized to be non-violent. This conflict may be more accurately reflected in a mother's ambivalence toward the policy of torture, rather than their support or opposition to torture.

Of course, it may not be value ambivalence driving any differences there could be. Previous literature also suggests that any differences could likely be due to women feeling less confident about their political knowledge. An additional reason why women

may be more likely to answer in an ambivalent manner toward torture is due to women's unwillingness to guess on certain issues. Mondak and Anderson (2004) found that women are less likely to guess to political knowledge questions than men, causing what looked like a larger gender gap in political knowledge than actually exists. This might translate into a "neither favor nor oppose" answer because women may genuinely be less likely to guess, they may feel like they need to be more informed about the subject to answer in a definitive way. Research has shown that women, even with equal political knowledge to men, still believe they are less knowledgeable (Mendez and Osborn 2009). These beliefs about one's own political knowledge could have a negative impact on an individual's willingness to take a personal stance on an issue as controversial and sensitive as torture. Additionally women may feel like they do not have enough information to have constructed a personal stance on torture, and they may simply be less willing to guess than men as suggested by Mondak and Anderson (2004).

Further, the gender gap may also be very apparent in an individual's willingness to answer definitively one way or the other regarding the use of torture. An analysis was conducted with a dummy variable with a value of 1 if the individual answered 'neither favor nor oppose.' and 0 if the individual answered that they either favored or opposed torture, with a definite response compared to the ambiguous 'neither favor nor oppose response.' While this response could have been motivated by several different factors, it is assumed that individuals that choose this answer either believe that they do not have enough knowledge to answer either way, do not care, or they could be motivated to answer this way due to conflict in values.

2.4 Data and Methods

Data and Methods

The American National Election Study, 2008: Pre- and Post-Election Survey

produced by the American National Election Studies (ANES) is used for this study. This

study allows for the analysis of individual attitudes toward torture. This dataset has over

2000 individual surveys from 34 US states. A Multinomial Logistic Regression is used to

analyze whether someone opposes torture as a technique used to interrogate terror

suspects. The analysis will use as the three principal independent variables: whether the

individual is female, whether the individual is a mother and whether she is a feminist.

The models will include an interaction between female and feminist, and for the mother

measure an interaction between parent and female.

Demographic factors identified by previous authors (Norrander and Wilcox 2008)

are included, as well as measures of an individual's fear concerning future attacks,

equality attitudes and feelings of warmth toward Bush, the military and Muslims which

likely are significant predictors of attitudes toward torture. Each independent variable, as

well as the interactions will be described below.

Dependent variable

The dependent variable for this analysis is the question from ANES 2008 that

asks respondents "Do you favor, oppose, or neither favor nor oppose the U.S.

government torturing people, who are suspected of being terrorists, to try to get

information?[4]" A Multinomial Logistic Regression method is used to analyze the

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[4] This is V085232 from the dataset. While there are questions regarding 'how much' an individual favors or opposes torture they are not used for the analysis. The reasoning behind this decision is that while

model.[5] This type of model is used because the dependent variable is a categorical

variable with the following responses available to the question concerning the use of

torture on suspected terrorist suspects by the US government; favor, oppose, neither favor

nor oppose. For ease of interpretation in the present paper, the results presented are for

the comparison between the opposition to torture and favoring of torture only, even

though all three responses to the main dependent variable are included in the model. A

further analysis is conducted to examine the cross-pressures that could exist that might

cause an individual to answer with an ambivalent response. This second model is used to

analyze an individual's likelihood of answering the question concerning torture in an

ambivalent manner (neither favor nor oppose compared to expressing an opinion one way

or the other), since the causes of this type of response are quite different from the

opposition or favoring of torture question. As discussed previously it is expected that

there is a gender gap between men's and women's opposition (or not) to torture. If the

hypothesis is correct women will be significantly different than men in their attitudes

toward torture.

Independent Variables

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individuals may likely feel more comfortable claiming that they only favor a little, the fact is that torture has been such a secret process that it seems likely that they are merely indicating how much they want to know about the torture. In this case they still agree with the method. As in the case of many human rights issues either you ban it or you accept it because once certain practices are accepted as plausible policy tools it is individuals in the government that decide when and where to use this method. It is the assertion of this study that if an individual says that they favor a little they are merely indicating their level of comfort with the knowledge of this policy, but in a situation of torture a yes/no decision must be made. Terror suspects are not 'slightly tortured' they are or they are not.

[5] The Multinomial Logistic Regression model is used because it is the most appropriate model for the data. The dependent variable has three categories, while two of those categories are ordered, moving from an "oppose" to "favor", the other category does not fit well in this ordered sequence. The other category is one that allows the respondent to answer that they "neither favor not oppose the use of torture." While this may appear at first glance to be a middling response to support for torture it could rather be a response that indicates ambivalence or conflict in certain values, which this study will discuss further in detail. In order to ensure that this assumption was correct an ordered logit model was conducted with a Brant test which was significant, indicating that the parallel regression assumption was violated with an ordered logit model.

There are three independent variables of greatest theoretical interest in this study. The first is the female variable, coded 1 if the individual is female. As discussed previously if women are simply socialized to be less supportive of aggression and violence there should be a gender gap in opposing torture among women. The second independent variable is whether or not the individual is a feminist. As Conover (1988) discussed if a person is a feminist she or he are more likely to have different values than other women or men, she notes "the injection of a woman's values into politics may be related to a commitment to democratic values" (Conover 1988, p. 989).[6] These women's values will likely be related to individuals rejecting the use of torture as an interrogation method. If the feminist variable is significant but the female variable is not there is support for the idea that feminists might have a unique viewpoint that makes them less likely to support torture and that they may be driving the gender gap in this area as Conover (1988) theorizes. Whether the individual is a female feminist or a male feminist should not matter in regard to the relationship between the values of feminism and support for torture. It is assumed the values of feminism should be constant whether the individual is female or male. If female is significant but feminist is not this indicates that women are very different from men in their attitudes toward torture, and that this difference is not dependent on whether the individual is a feminist.

The ANES 2008 dataset does not include a question asking individuals if they consider themselves a feminist. The way the variable is measured herein is by the

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[6] The fact of whether the person is a male feminist or a female feminist is not relevant to this study. As Conover (1988) discussed feminism is a set of values that men and women can hold, and these values may be related to certain policy positions. Feminists may simply be driving the gender gap because there are more female feminists than male feminists so when analyses do not control for feminists they lose this dimension of the individual that might be related to party preference, policy positions, and candidate votes (see Conover 1988).

feminist thermometer score. While this is not a perfect measure, the thermometer rating of feminists is the best proxy the ANES has for how strong of a feminist the individual considers themselves to be. It is unlikely that someone would have a high thermometer rating of feminists if the person does not consider themselves to be part of the group, at least in this case where an individual can freely choose to be a feminist, as opposed to a thermometer rating of an ethnic or racial group. It is assumed that all feminists, male or female have the same values of equality that encourage them to oppose torture.

The first two independent variables, female and feminist, measure the hypothesis that women are more likely to oppose the use of torture. Yet the opposite hypothesized direction of the gender gap is that women, in their roles as mothers, are more likely to support torture. Because women who are mothers are likely to make decisions based on their relationships, as specified above, this study includes an interactive specification of parent and whether the person is a woman. The parent question is drawn from the question in the survey which asks whether there are children in the household. For the measure of parenthood, this is less than ideal. There are two potential issues with this measure. The first is that the child living in the household may not be the biological child of the individual respondent. While the children in the household may not be the biological children of the female respondent it seems likely that for the most part the children will be the biological children of the women due to the fact that even if the woman is divorced the majority of women do receive custody of their children (Fox and Kelly 1995). Further, it does not seem unreasonable to assume that these women have taken on a somewhat mothering role, even if the children are not their biological children. Another potential problem with this variable is that is does not measure if a woman has

children that are grown and have already left the home. While it may be that these women may not feel like they have to protect their children as much, these are two potential measurement errors by using this variable. This though is the only variable included in the data that measures an individual's parental status. It is assumed by this study that only the interaction between parent and female (capturing whether the respondent is a mother) will have a special interest in supporting the use of torture due to the interaction between their status as parent and their female status in society. However, literature indicates that men have a special interest in safety and protecting their families; fathers may have the same motivations as mothers in regard to the safety of their children. If an individual has children under 18 in the household they are coded at 1 for the parent dummy variable, controlling for the possibility that male and female parents have the same motivations in regard to support for torture. For the measure of mother the interaction between female and parent is used in the model.

Controls

Defend Human Rights

This variable measures whether an individual feels that US policy should focus on human rights. If the individual does believe that human rights should be an important US policy goal they are coded as a 1. As some of the research on gender and foreign policy (Shapiro and Mahajan 1986) has shown women may be more likely to support human rights as a policy goal of the U.S. An individual's belief on human rights is an important consideration for this analysis. If an individual does believe that human rights should be a priority it will likely influence whether they are a feminist, as mentioned previously feminists are more likely to value equality and support human rights. In addition to this

torture has been a primary part of much of the human rights dialogue over the past 50 or 60 years. If a person is very supportive of preserving human rights, opposing torture is likely a primary policy goal. It is expected that this variable is positively associated with opposition to torture.

Political Partisanship

More conservative individuals are expected to be more likely to support torture. As discussed by previous studies of the gender gap, women are more likely to identify with the Democratic party (Norrander 1997; Norrander 1999; Kaufmann and Petrocik 1999). Without controlling for this relationship a significant relationship between gender and torture may simply be a result of the fact that more women are Democrats and less likely to support a Republic presidential policy. This measure includes four different dummy variables for the following political affiliation of the individual; Democrat, Republican, Independent, and Other. In the analysis Republican identification is used as the comparison category. Each of the other three dummies is expected to have a negative relationship with favoring torture as compared to Republican identification.

Race

Several difference race dummy variables are included to correct for oversampling and for possible influence of race on the acceptance of torture. In addition to the influence that race might have on acceptance of torture, there might additionally be an intersectionality influence between race and female, therefore it is important to control for race in order to accurately evaluate the role that gender has on attitudes toward torture. Also, race might influence gender differently, socialization for white women may be very different than that of black women or Latina women. A dummy for black, Asian,

Latino, and other race is included in the analysis. White is the comparison category. It is unclear exactly what influence race might have on attitudes toward torture, clearly these minority groups have been unrepresented at times in American history and might feel likely to have more egalitarian attitudes toward minorities. They may simply feel more sympathy toward groups that they feel do not have as much power, and may be targeted specifically due to their race or ethnicity.

Education

An individual's education is expected to reduce their support for torture, and could also be correlated to the gender of the individual. In the sample of individuals women have not always had the access to education that current young women have. Therefore a relationship between gender and torture, without controlling for education might hide the role that education could have on non support for torture. Previous research has found that more education is correlated with a higher likelihood of holding liberal values among women (Norrander and Wilcox 2008). Education is expected to directly influence the belief that torture is not appropriate. The more education a person has the more likely they are to understand that once a policy that reverses human rights policies is accepted the danger of that policy being used in more extensive situations than what the government originally discussed is likely.[7] In other words, education extends the time horizon of the individual. This variable is measured as the number of years of

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[7] In the case of torture the government makes it very clear that this is only used against terror suspect that are foreign and who have vital information, but at some point when a domestic terrorist that is a US citizens is caught who presumably has 'vital' information what is the argument going to be to not use the same techniques when it is arguably the same American lives in both cases that potentially could be saved.

education that an individual has received, and a positive relationship is expected between

education and an individual's opposition to torture.[8]

Age

Age is likely to influence a person's attitudes toward the appropriateness of

torture. Age has been found to influence a person's attitudes toward foreign policy, while

it is not entirely clear how age might influence beliefs about torture, it has been found to

influence some foreign policy attitudes (Fite, Genest and Wilcox 1990, Layman 1997).

Women also live longer than men on average, without controlling for this variable it may

simply be partly the influence of age on attitudes toward torture as opposed to gender.

This variable is measured by how many years old a person is. It is expected that in the

case of torture the older a person is the more likely they are to oppose the use of torture.

Older individuals have much more life experiences and have lived through many

historical events where human rights were violated so they might be much more sensitive

to the importance of supporting human rights.

Religion

The measure of whether religion is important to an individual is included in the

model as a control because most religions encourage their members to respect human

rights and to support the respectful treatment of other humans. While obviously this may

not be universal, for the most part it is accurate. This dummy variable measures whether

a respondent states that "religion is important in their life." As Conover (1980) found

women are more likely to be religious and therefore it is important to control for the

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[8] This variable is somewhat flawed, it ends at 17 years even though some individuals in the analysis do have terminal degrees. The other available education variable that included the degrees an individual has received contains a large amount of missing data making the years of education variable the best possible measure of education available.

influence that religion has on attitudes. Women may simply have stronger religious

values and this may cause them to look like they support torture less if it is not controlled

for. Individuals that do believe that religion is important are coded as 1. It is expected that

this is positively related to opposing torture. If a person's religion is important they will

likely use their religious beliefs to guide them on what decisions they should make in

regard to supporting public policies, as some research has found individuals that attend

church more often seem to support torture less than individuals that do not attend as often

(Green 2007)

Chance of an Attack

This variable controls for the level of fear that an individual might have of a

future attack. There is a high likelihood that the more fear a person has of a future attack

the more likely they are to agree with the use of torture in interrogation in order to

prevent such an attack. Again the fear of attack could also influence women more than

men, women may be more likely to fear for their families and their children due to their

maternal instinct. This variable is measured where a high score of 7 is signifying a high

chance of an attack and a low score of 1 signifying a low chance of an attack. It is

expected that this variable is negatively related to opposing torture. If a person believes

there is a higher likelihood of an attack they are less likely to oppose torture

Equality Attitudes

This variable measures the equality attitudes of individuals. It was created by

using factor scores to three different questions related to an individual's attitudes toward

equality in society.[9] A higher score indicates attitudes that support more equality in

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[9]This score was created from the following variables; V085163, V085165, V085166. They include the
three following questions, "We have gone too far pushing equal rights," "We'd be better off if we worried

society, where a lower score signifies less support for equality and equality policies in society. Women may be more egalitarian than men and more interested in equality. This difference in beliefs could influence the relationship between gender and attitudes toward torture. This variable is included to control for individuals that genuinely do support more equality and might in many ways have attitudes that are close to feminist attitudes, but the individual does not consider themselves a feminist. It is hardly unreasonable to say that many individuals, men and women are uncomfortable calling themselves feminists but may hold the same equality attitudes. It is unreasonable to disregard these attitudes simply because individuals may be uncomfortable with the label of 'feminist.' A positive relationship is expected between equality attitudes and an individual's opposition to torture.

Muslim Thermometer

This is intended to measure the level of warmth that an individual may have toward Muslims in general. If a person has a high thermometer score toward Muslims they are likely a Muslim or closely connected with the Muslim community. If this thermometer is high a person is more likely to oppose torture since they may feel like it will be directed primarily toward Muslims. The terrorist acts of September 11, 2001 were caused by radical Muslims. For this reason, warranted or not, the public, the media, and many in the government may see Muslims and terrorists as the same. Due to the perceived connection between Muslims to terrorism these individuals may see Muslim individuals as the most vulnerable to a policy of torture. The thermometer score is coded from 0 as cold to 100 as warm. A positive relationship is expected for this variable.

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less about equality," "Not a big problem is some have more chance in life." They are all measured on a 5 point scale from agree strongly to disagree strongly. They have an alpha of 0.72. This score was created by using the factor scores from these three different variables to measure the concept of support for equality.

George W. Bush Thermometer

This variable measures how much support the individual has toward George W. Bush. In this case it is assumed that if an individual has high support for Bush they are less likely to oppose torture. This measure is somewhat different from a performance measure, a measure of an individual's rating of how good of a job the president is doing. Rather, this measuring attempts to control for an individual's personal preference and affinity for the president as an individual. This is primarily due to the fact that the George W. Bush administration supporting the policy of using these interrogation methods and if a person has high support for Bush this is likely connected to support for his policies. This score as with the previous score is measured from 0 to 100, with 0 signifying cold and 100 signifying warm. A negative relationship is expected for this variable

Military Thermometer

This measure is intended to control for an individual's support of the military, probably the group most likely to face violence from terrorists in Iraq and Afghanistan. Clearly terrorists primarily attempt to attack civilians, the military engagement of these terrorists overseas has caused the US military to take the brunt of this violence. If a person has a high amount of support for the military they are likely to support them doing whatever they feel like they need to, since the military has been a supporter of these interrogation techniques, that could theoretically make the military safer and make their job of curbing terrorism easier. A high thermometer score for the military might also indicate that the individual has a family member in the military, without controlling for this the actual influence of gender on torture might be attributed to gender because some of these women might be worried about their husband or children. This variable is coded

as a 0 for cold to 100 for warm. A negative relationship is expected between this variable and opposition to torture.

The descriptive statistics for the variables used in all of the analyses for the paper are presented in Table 2.1. These are the descriptive statistics for the sample.[10] As can be seen, women are slightly overrepresented in the study, making up 57% of the sample. In regard to the question about torture, there was a majority of individuals in the sample that opposed torture at 52%. About 24%, of individuals answered the question in an ambivalent manner, with the "neither favor nor oppose" response.

Table 2.1 also indicates that about 39% of the sample did believe that defending human rights should be an important US policy goal. As can be seen with ideology and the extreme ideology variables, on average, individuals in the study considered themselves to be moderates. A slight majority of the individuals in the study were white, and on average had about 13 years of education. The average age is 47 in the sample and the respondents reported they considered themselves to be fairly religious with close to 76% considering religion to be important in their lives. Only about 23% of women had children under 18 living with them. The thermometer scores for the different groups show an average score for feminists of 58, where the average score for Muslims and GW Bush were lower at 51 and 38 respectively. The thermometer for military support has a much higher average of 80. About 42% of individuals consider themselves Democrats, where only about 19% identify with the Republican party. Individuals that identify as Independent make up 31% of the sample and those with an other party identification make up only 0.7% . Yet due to the fact that the Independent party identification could

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[10] The ANES 2008 Survey oversampled Latino and African-American respondents. The descriptive statistics provided in the Table 2.1 are not weighted, rather they are the descriptive statistics for the sample, not the population.

encompass the most liberal to the most conservative, it is difficult to predict the

relationship between Independents and support for torture. The question wording for all

the variables can found be in Appendix A.

Table 2.1: Descriptive Statistics of Variables used in Analyses				
Variable	Observations	Mean	Min	Max
Torture	2068	2.288	1	3
Female	2323	0.570	0	1
Neither Favor Nor Oppose Use of Torture	2068	0.236	0	1
Feminist	1972	58.015	0	100
Parent	2323	0.358	0	1
Defend Human Rights	2099	0.387	0	1
Attention to Campaign	2101	3.075	1 (Very little attention)	4 (A lot of attention)
Democrat	2287	0.427	0	1
Republican	2287	0.189	0	1
Independent	2287	0.312	0	1
Other Party	2287	0.072	0	1
Extreme Ideology	1587	2.190	1	4
White	2311	0.624	0	1
Age	2301	47	17	90

Table 2.1: Descriptive Statistics of Variables used in Analyses (cont'd)

Education	2312	13.076	0	17
Equality Attitudes[11]	2081	-3.78e-09	-1.594	1.346
Equal Opportunity	2101	1.480	1 (Agree Stongly)	5 (Disagree Strongly)
Too Far with Equal Rights	2094	3.181	1 (Agree Stongly)	5 (Disagree Strongly)
Problem if Not Equal Chance	2094	2.491	1 (Agree Stongly)	5 (Disagree Strongly)
Should Worry Less About Equality	2096	2.979	1 (Agree Stongly)	5 (Disagree Strongly)
No Problem with Unequal Chances	2088	3.378	1 (Agree Stongly)	5 (Disagree Strongly)
Fewer Problems with More Fairness	2097	2.135	1 (Agree Stongly)	5 (Disagree Strongly)
Chance of Attack	2056	3.954	1(Low chance)	7(High chance)
Muslim Thermometer	1972	51.78	0	100
GW Bush Thermometer	2093	37.72	0	100
Military Thermometer	2077	79.99	0	100
Religious	2309	0.755	0	1

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[11] The equality attitudes index is composed of six different variables. This index is constructed using factor scores. The descriptive statistics for these six variable is included in the table and includes the following; Equal Opportunity (V085162), Too Far with Equal Rights (V085163), Problem if Not Equal Chance (V085164), Should Worry Less About Equality (V085165), No Problem with Unequal Chances (V085166), and Fewer Problems with More Fairness (V085167) . Refer to Appendix A for full wording of questions.

2.5 Results

Results

Model 1: The Gender Gap and Favor/Oppose

The results of the first model are presented in Table 2.2. A Multinomial Logistic Regression model is used to analyze the relationship between gender and attitudes toward torture. The dependent variable in the model is a categorical variable with three values; favor, oppose, and neither favor nor oppose the use of torture on terrorist suspects. Yet the results presented in Table 2.2 present only the comparison between favor or oppose torture, a further analysis of the neither favor nor oppose response is presented later in this study. Three separate analyses were conducted, one which included all of the individuals, one that included only female respondents and the final that included only male respondents. This is important to ascertain whether specific variables influence men's and women's attitudes toward torture differently.[12] The gender gap in support for torture model does find support for the hypothesis that men and women have very different attitudes regarding the support for torture. The model does show support for the hypothesis that women are more likely to oppose the use of torture. There is a statistically significant gender gap between men's and women's views toward the appropriateness of torture as an interrogation technique. The model is significant with a LR chi square of 329.08. Controlling for feminism, and controlling for whether a woman is a mother, females are more likely to oppose torture, instead of favoring the use of torture although only marginally significant with a p value of 0.056. While holding other factors constant

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[12] While separating female and male into two models is suggestive the differential influences of specific variables by gender there are limitations to using this approach.

there is a significant increase in the probability of opposing torture if the individual is female. If the respondent is female, rather than male, there is an increase of 0.038 in the probability that she will oppose torture. This supports the idea that there is a gender gap in the attitudes toward the use of torture, not simply caused because the woman is a feminists.

There are two different directions that are considered for the hypothesis, one was that mothers specifically would be the driving factor behind the gender gap, and they would support torture due to their perceived roles as mothers and protectors of their children. This is not confirmed in the analysis, being a parent had no impact on whether a woman opposed torture. The interactive relationship between parent and gender represented whether a woman was a parent; this interaction term is not significant, meaning that mothers are not more likely to support torture. There is no significant relationship between mothers and attitudes toward torture.

The second direction proposed is that women are less supportive of torture and that there may be two possible causes of this. The first is that the gender gap is caused primarily by a subset of women (see Conover 1988), that feminists are actually the ones that cause this gender gap due to their attitudes and that women who are not feminists have similar attitudes to men. Again, this study found no support for this proposition in regard to the use of torture. It was assumed that as other authors have proposed (Conover 1988; Cook and Wilcox 1991) feminists should be more likely to oppose torture since typically they have a strong position toward supporting human rights and protecting civil rights of individuals. There was no support found for this hypothesis; whether someone is a feminist is not significantly related to opposition to torture. It appears that being a

feminist does not have a significant connection to the views toward the appropriateness of torture.

One reason for the finding may be that "feminist" is not measured accurately by the feminist thermometer. Scholars such as Conover (1988) suggest that feminists are more likely to place a high emphasis on equal rights and civil rights. Yet this present study suggests that this may not be captured by the feminist measure. However, the scale that was included to measure an individual's equality attitudes is a significant predictor of opposition to torture. There is an increase in the probability of 0.067 that an individual will oppose torture with one standard deviation increase in equality attitudes.[13] It is difficult to ascertain whether women that identify with feminists are not as focused on equality as some have assumed, or maybe feminist views toward equality are not directly translated to the use of torture of potential terror suspects. The equality attitudes scale may measure individual's actual views toward equality much better than the feminist thermometer. Many individuals may be unwilling to identify with feminists, yet they hold similar attitudes toward equality and the rights on individuals.

Table 2.2: Multinomial Logistic Regression Analysis of Favoring use of Torture as Compared to Opposing						
Variable	All		Female		Male	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio

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[13] The "prchange" command in Stata is used to calculate the changes in probability of opposing torture with changes in equality attitudes. This command is used throughout to calculated changes in probabilities.

Table 2.2: Multinomial Logistic Regression Analysis of Favoring use of Torture as Compared to Opposing (cont'd)

Female	-0.312†	0.732	---		---	--
	(0.163)					
Feminist	-0.001	0.999	0.004	1.004	-0.008	0.992
	(0.003)		(0.004)		(0.005)	
Parent	0.046	1.047	-0.022	0.978	-0.033	0.968
	(0.197)		(0.199)		(0.210)	
Parent*Female	-0.141	0.868	---	---	---	--
	(0.262)					
Defend Human Rights	-0.348*	0.706	-0.373*	0.689	-0.247	0.781
	(0.135)		(0.190)		(0.200)	
Democrat	-0.793***	0.452	-0.644*	0.525	-1.123***	0.325
	(0.208)		(0.284)		(0.317)	
Independent	-0.688***	0.503	-0.793**	0.452	-0.640*	0.527
	(0.185)		(0.266)		(0.268)	
Other Party	-0.662**	0.516	-0.564	0.569	-0.907*	0.404
	(0.291)		(0.408)		(0.432)	
Black	0.453*	1.573	0.227	1.255	0.781**	2.184
	(0.190)		()		(0.293)	
Asian	-0.174	0.840	-1.026	0.358	0.400	1.492
	(0.552)		(1.071)		(0.737)	

Table 2.2: Multinomial Logistic Regression Analysis of Favoring use of Torture as Compared to Opposing (cont'd)

Latino	0.054	1.055	-0.029	0.971	0.103	1.108
	(0.187)		(0.263)		(0.276)	
Other	0.450	1.568	0.450	1.568	0.593	1.809
	(0.358)		(0.526)		(0.507)	
Equality Attitudes	-0.628***	0.534	-0.504***	0.604	-0.778***	0.459
	(0.091)		(0.124)		(0.140)	
Education	-0.027	0.973	-0.047	0.954	-0.018	0.982
	(0.029)		(0.041)		(0.041)	
Age	-0.024***	0.976	-0.018**	0.982	-0.030***	0.970
	(0.004)		(0.006)		(0.007)	
Religion Important	-0.602***	0.548	-0.749**	0.473	-0.479*	0.619
	(0.153)		(0.224)		(0.214)	
Chance of Attack	0.117**	1.124	0.033	1.034	0.213**	1.237
	(0.045)		(0.063)		(0.067)	
Muslim Thermometer	-0.012***	0.988	-0.008†	0.992	-0.017***	0.983
	(0.003)		(0.004)		(0.004)	
GW Bush Thermometer	0.003	1.003	0.004	1.004	0.002	1.002
	(0.003)		(0.004)		(0.004)	
Military Thermometer	0.022***	1.022	0.023***	1.023	0.019***	1.019
	(0.004)		(0.005)		(0.005)	
Constant	0.165		-0.344		0.599	

Table 2.2: Multinomial Logistic Regression Analysis of Favoring use of Torture as Compared to Opposing (cont'd)

LR chi²	329.08**		148.80***		212.96***	
Pseudo R²	0.0911		0.077		0.129	
N	1777		983		794	
Note: †p<0.06, *p<0.05, **p<0.01, ***p<0.001. Standard errors in parentheses						

For the control variables the results somewhat supported what was expected. A person's partisanship was a significant predictor of attitudes toward torture. Individuals that identified with Democrats, Independents, and also other party were significantly less likely to favor torture than individuals that identified with the Republican party. If a person identifies with the Republican party they are more likely to support the policies of their party or those of their party that are in power.

An individual's age is related to their likelihood of opposing torture, for each standard deviation increase in age, 16.54 years, there is a 0.098 increase in the probability that the person is opposed to torture. This again is in the same direction as expected, the older a person gets the more likely they may be to connect policies that destroy human rights to previous historical events. An individual's fear of a future attack does significantly influence their beliefs about torture. For each unit increase in the likelihood of a future attack there was a 0.018 increase in the probability that the person would favor torture. This shows support for the idea that people are likely to support the use of torture because they think that it will reduce the chance of a terrorist attack, and their views of how likely this attack is can influence their ideas about preserving human rights, in this

case torture. For the religious variable, this is significant and in the expected direction. If a person believes that religion is important in their lives there is an increase of 0.113 in the probability that they will oppose the use of torture.[14]

The three thermometer scores that measured individual's attitudes concerning the military, Muslims, and George W. Bush all were significant and in the expected directed. As presumed when a person had increased warmth toward Muslims they had increased odds of opposing torture. For each standard deviation increase in warmth toward Muslims, a 23 unit increase, there is a 0.031 increase in the probability that they would oppose torture. For increased warmth toward George W. Bush there is a decreased likelihood that the individual would oppose torture. With each standard deviation increase in warmth toward Bush, 28 points, there is a 0.005 increase in the probability that the person would favor torture. Again this makes sense because the Bush administration supported this tactic. For the military thermometer there is also a significant negative relationship between positive feelings toward the military and the opposition to torture. For each standard deviation increase in support of the military, about 21 points, there is a 0.075 increase in the probability that the individual will favor torture. The remaining control variables did not statistically influence attitudes concerning torture.

Differences between men and women

The results of these analyses do show that there are some differences in the way different variables influence men's and women's opposition to torture. Both of the models are significant. There were several factors that influence only men's attitudes toward torture, but not women's. For individuals that identify with an other party as

compared to the Republican party there is a significant increase of 0.165 in the probability that the individual will oppose torture. This relationship between identification with an other party is not significant for women. The belief about the chance of future attacks is only significant for men. For each unit increase in the belief that there will be a future attack there is a 0.037 increase in the probability that the individual will favor torture. The race of the individual is only significant in the male model, where if an individual is black, as compared to white, there is an increase of 0.119 in the probability that they will favor torture. This relationship is not significant for women. The only variable that is significant for women and not for men is the interest in human rights. If a woman feels like human rights is an important foreign policy goal there is an increase of 0.102 in the probability that they will oppose torture.

Opposition to torture and the gender gap

The results of these analyses definitely support the proposition that there is a gender gap between men and women in regard to the use of torture. There was not support for the idea that being a feminist or a mother had any impact on the beliefs concerning torture. There was a significant relationship between gender and opposition to torture. This finding lends support for the hypothesis that women may be socialized to believe that violence is not appropriate, they may not see it as the best way to pursue the goals of the community and the individual. Since there was not support for the feminist hypothesis, this shows that the relationship between the hypothesized 'women's perspective' only being present in feminists (Conover 1988) may not be very accurate. The equality attitudes score may do a better job at capturing some of these equality attitudes that some have hypothesized feminists have. The notion of what a feminist is

can be quite an amorphous concept and individuals could have very different understandings of the term. Considering oneself to be a feminist may not be as connected to a belief in human rights for all individuals as some have suggested.

Model 2: The gender gap and 'neither favor nor oppose torture'

The variables used in this second model are somewhat different than the variables used in the previous model. As discussed above this model focuses on whether women are more likely to be ambivalent, meaning answer that they "neither favor nor oppose the use of torture," as compared to male respondents. In addition, this model analyzes whether the previously discussed cross-pressures of a woman being a parent and being socialized to be non-violent might actually cause women to be more likely to respond to the question of torture with an ambivalent response rather than with a definitive favor or oppose stance.

Female

Female is the one of the main independent variables in this model. The model analyzes whether women are more likely to answer 'neither favor nor oppose' than men as some previous research has found, especially among older women (Rapoport 1982). The neither favor nor oppose response represents ambivalence or a lack of certainty concerning which stance an individual holds. Rapoport (1982) specifically looked at "don't know" responses, which the question regarding torture in this data does not include. Yet a neither favor nor oppose response likely represents a similar response category.

Parent*Female

This interaction is the second independent variable of interest included to ascertain whether there is a special relationship with motherhood (see Ruddick 1980) that may cause women to behave in different ways than women who are not mothers or men. It is assumed that being a mother will increase the likelihood that an individual will have very definite attitudes toward a policy that could potentially influence the safety of their children. Yet as the previous analysis found women were less likely to support torture. There may be some cross-pressures caused by a woman's role as a mother and the socialization against violence that may likely cause women to be less supportive of torture. In this case it is expected that this interaction will be positively related to ambivalence. A woman who is a mother may feel these conflicting values and be more likely to answer in an ambivalent way concerning torture.

Feminist

The same measure as the previous model is used to measure whether someone is a feminist. It is assumed that feminists are less likely to answer the question as neither favor nor oppose because they might feel more empowered than other women.

Attention to the Election Campaign

This is an additional variable added to the model that measures political interest. If an individual is following the campaign they are likely to be interested in politics and will be more likely to answer definitively if they oppose or favor the use of torture. Research has shown that individuals that are less attentive or interested in politics are more likely to answer with "Don't Know" responses (Francis and Busch 1975.) This variable is expected to be negatively related to the neither favor nor oppose response.

Race Dummies

Four separate dummy race variables are included in the analysis to control for racial and ethnic influences on ambivalence toward torture. As in the previous analysis there is a possibility of intersectionality between race and gender than might cause women of a minority race to answer in an ambivalent manner toward torture, without controlling for this influence it might appear as if all women are more ambivalent. Some research has shown that there may be differences in political knowledge by race, or simply differences in political knowledge due to the salience of the issues to the racial group (Hutchins 2001, Mondak and Anderson 2004). In addition to difference in political knowledge, non-white individuals have been found to be more likely to answer with the ambivalent "Don't Know" response (Francis and Busch 1975). The four race dummies included are black, Asian, Latino, and other race. The comparison category for the race dummy variables is white.

Education

This variable is the same education variable as in the previous analysis that measures the years of education that a person has. Again, as in the previous analysis there might be a relationship between gender and education, where women might have lower levels of education than men. It is expected that the more education an individual has the more likely they are to answer in a definite way about their position on torture due to their increased knowledge and confidence. A negative relationship is expected between education and the neither favor nor oppose response.

Political Partisanship

The partisanship of an individual may influence their willingness to answer in a definite way toward the use of torture. Since women are more likely to identify with the

Democratic party it might appear that women are less ambivalent toward torture, where in reality it is simply the influence of more women identifying with the Democratic party. A Democrat will likely be more comfortable answering definitely about the use of torture since it is not tied to a their partisan platform; whereas a Republican who might not support torture might be more likely to respond in an ambivalent manner because they are more likely to have a conflict in values between support for their party and their own personal values.

Age

It is unclear how age might influence a person's willingness to answer the question about their position on torture. The expected response is that the older an individual is the more likely they are to answer either oppose or favor, instead of the ambiguous neither favor nor oppose response. As noted previously women live longer than men and older women as well may feel less qualified to answer in a definitive way due to more socialized pressure against political involvement and opinions when they were raised.

Parent

This variable is coded as 1 if the individual has a child in the home under 18. It is hypothesized that if a person does have a child they may be more likely to have very specific beliefs concerning torture, a policy that could potentially help to keep their child safer. Again this variable is also a constituent term in the main interaction between female and parent, which represents whether an individual is a mother. A negative relationship is expected with this variable, parents will be more likely to have firm beliefs about torture.

Defend Human Rights

This is the same measure as in the previous analysis, an individual is coded as a 1 if they think that defending human rights should be a policy priority of the US and 0 if they do not. It is assumed that if a person is passionate about human rights they will be more likely to oppose torture and to not answer with a neither favor nor oppose answer, there is an expected negative relationship with this variable and the neither favor nor oppose response.

Chance of an Attack

This again is intended to measure individual's fear about a future attack. The more fear they have, the less likely they will be ambivalent about torture. This is coded the same way as in the previous analysis, it is a scale with 1 being the least chance of future attack and 7 being the highest. A negative relationship for this variable is expected. The more worried about future attacks that an individual is the less likely they are to be ambivalent toward torture.

Muslim Thermometer

If a person again has a high Muslim thermometer they are likely to empathize with Muslims or actually be a member of that group so they will likely have strong beliefs about the use of torture against largely Muslim militants. For this analysis though the thermometer is folded to measure the extremes. It is assumed that individual at the extremes are more likely to have a position on the use of torture. The Muslim thermometer is folded in a way that subtracts 50 from the values and the absolute value is given to that individual.[15] An individual that had a 0 on the thermometer would receive a

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[15] Results do not change if one folds the thermometer at the median instead. Thus, in this analysis, the thermometer that was folded at the value of 50 for ease of explanation.

50, as well as the person that had a 100. It is expected that the Muslim thermometer is negatively related to the neither favor nor oppose response. Again the more extreme individual's feel about Muslims the less likely they are to be ambivalent toward torture.

George W. Bush Thermometer

The more supportive an individual is of the Bush presidency the more likely they are to support his policies, and the more likely they are to answer the question in a definitive way. This thermometer score ranges from 0 to 100, and is coded where 0 is cold and 100 is warm. This variable is not folded in the way that other variables are because this variable is used as a measure for support for Bush policies, and also included in the model there will be an interaction between female and this Bush thermometer to measure the conflict in values that might occur due to being female and supporting Bush. There is a negative relationship expected between this variable and the neither favor nor oppose variable.

Female*GW Bush Thermometer

This interaction is between women and the thermometer score for Bush. This interaction is expected to measure the ambivalence toward torture that may be caused by women, who have been seen from the previous analysis as less likely to support torture, and positive feelings toward Bush. These positive feelings toward Bush and the negative feelings toward a Bush-supported policy of torture may cause a conflict in values that could cause women to answer in an ambivalent way toward torture. A positive relationship is expected with this variable. If a person is a female and has positive feelings toward Bush increase, this will likely increase their probability of answering in an ambivalent way toward the support of torture.

Military Thermometer

This measures an individual's warmth toward the military. As with the Bush thermometer, if an individual feels very close to the military they may be more likely to support the use of torture and less likely to answer neither favor nor oppose. As with the Muslim thermometer this variable was folded at the 50 value in the same manner as the Muslim thermometer in order to measure the extreme values.[16] A negative relationship is expected with this variable.

Religion

As in the previous analysis it is expected that if an individual feels that religion is important they are likely to oppose torture. Women also have been found to be more religious than men (Conover 1988), without controlling for religiosity this influence may be captured in the gender variable. In regard to this question a person who does feel like religion is important is likely willing to state their opposition to torture. If a person does not have an important connection to religion they may have no reason to oppose torture, and will be more likely to be ambivalent toward torture. A negative relationship is expected between the importance of religion dummy variable and neither favor nor oppose torture response.

Equality Attitudes

This scale measures a person's feelings concerning equality. This scale is the same scale used in the previous analysis. It is expected that the more equality attitudes an individual has the more likely they are to answer in a definitive way concerning the policy of torture. If a person does have high equality attitudes and is interested in

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[16] This thermometer was also folded at the median and used in the analysis. The results again were the same so the variable that was folded at the 50 was used in the final analysis.

increasing equality this will likely provide a justification for their opposition to torture. It is unlikely that individuals with a high level of equality will be ambivalent toward a policy that could clearly reduce equality among individuals, by exposing some individual to torture.[17] A negative relationship is expected with this variable.

Female*Feminist*Parent

This interaction is included to measure the increased ambivalence that conflict in values might cause. As a mother a woman might see protecting her child as a priority, yet as a feminist she might see that protecting civil liberties is also an important goal. This interaction is expected to have a positive relationship with ambivalence, it is expected these values might cause cognitive dissonance in an individual. If a woman falls into this category she will likely have some conflicts that might cause her to be ambivalent, or at least answer that way, regarding the policy of torture.

Feminist Thermometer*Bush Thermometer

This variable also measures a conflict that might be occurring in an individual's values. If an individual has positive feelings toward GW Bush but also is a feminist they may have some conflict on whether or not they should support the policy of torture supported by the Bush administration.[18] They might also not feel comfortable supporting the policy due to their values but might on some level defer to his judgment because he is the president and respond with ambivalence.

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[17] This measure is not folded because it is unclear how low equality attitudes may influence attitudes toward torture. Folding this variable assumes that having low equality attitudes and high equality attitudes are equally likely to cause a person not to be ambivalent. It is not clear that this is the case.

[18] While it may seem unlikely that many women that consider themselves feminist would also support Bush, there are some that do. Of course it is difficult to place an actual meaning to a specific value in the thermometer, yet by looking at the top 25% of individuals for both groups there are 182 individual that fell into the top 25% in the warmth toward Bush and Feminists.

Table 2.3: Logistic Regression Analysis of Answering Neither Favor Nor Oppose Torture

Variable	Coefficient	Odds Ratio
Female	-0.355 (0.230)	0.701
Feminist	-0.001 (0.005)	0.999
Parent	0.311 (0.475)	1.365
Parent*Female	0.101 (0.569)	1.106
Feminist*Parent	-0.008 (0.008)	0.992
Attention to Campaign	-0.187** (0.071)	0.829
Defend Human Rights	-0.152 (0.125)	0.859
Democrat	-0.064 (0.197)	0.938
Independent	-0.088 (0.179)	0.916
Other Party	0.090 (0.257)	1.094
Black	0.188 (0.172)	1.207

Table 2.3: Logistic Regression Analysis of Answering Neither Favor Nor Oppose Torture (cont'd)

Asian	0.418	1.519
	(0.421)	
Latino	0.030	1.030
	(0.172)	
Other Race	0.600*	1.822
	(0.293)	
Equality Attitudes	-0.170*	0.844
	(0.084)	
Education	-0.045	0.956
	(0.027)	
Age	-0.015***	0.985
	(0.004)	
Religion Important	-0.053	0.948
	(0.141)	
Chance of Attack	-0.013	0.987
	(0.042)	
Muslim Thermometer	-0.001	0.999
	(0.004)	
GW Bush Thermometer	-0.005	0.995
	(0.006)	
Military Thermometer	-0.006	0.994
	(0.004)	

Table 2.3: Logistic Regression Analysis of Answering Neither Favor Nor Oppose Torture (cont'd)

Female*GW Bush Thermometer	0.011*	1.011
	(0.004)	
Female*Feminist*Parent	0.002	1.002
	(0.009)	
Feminist*GW Bush Thermometer	0.000	1.000
	(0.000)	
Constant	0.940	
LR chi²	75.22**	
Pseudo R²	0.040	
N	1777	
Note: *p<0.05, **p<0.01, ***p<0.001. Standard errors in parentheses		

Results

This model is significant with a LR chi square of 75.22. The results of the analysis do not show that women are more likely to answer with a neither favor nor oppose response to the question regarding torture. Female is not significant, in regard to this question, women are no less willing than men to answer definitively in regard to policy issues. There were though some expected results with this analysis. The second main variable of interest, the interaction between female and parent, was also not significant. Mothers were not more likely to be ambivalent toward torture than other individuals. Age is significant, as a person gets older they a more likely to answer definitively for or against torture. For each standard deviation increase in age there is a

0.04 decrease in the probability of answering with an ambivalent response. Attention to the campaign is significant. For a one unit increase in the attention to a campaign there is a 0.04 decrease in the probability that an individual would answer with a neither favor nor oppose response. This is expected, the more that an individual is interested in politics the more likely they are to have a position on the use of torture and the willingness to express this view.

The only other variable in the analysis that is significant is the interaction between female and the GW Bush thermometer. This interaction is intended to measure the ambivalence that might be caused by conflicting values. In this case a woman might be less likely to support torture, due to some of the reasons discussed earlier such as socialization, yet if they have favorable feelings toward GW Bush they may be conflicted on how to answer a question regarding the use of torture. The GW Bush thermometer is intended to measure a person's warmth toward the Bush administration. This variable is significant suggesting that this conflict of interests might cause individuals to answer with an ambivalent response due to this conflict. As the thermometer score increases for GW Bush among women it increases the likelihood that they will answer with a neither favor nor oppose response.

The divergence between men and women in Figure 2.1[19] shows the influence that the interaction between female and GW thermometer has on the probability that the individual will answer in an ambivalent way toward the policy of torture. Near the mean score for the GW Bush thermometer men and women share the same probability of

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[19] The probabilities in Figure 2.1 are based on men and women that are white, believe that religion is important, and are parents. All other values are at their means. Stata's "prvalue" command is used to calculate the predicted probability of an individual being ambivalent toward torture with differing GW Bush thermometer scores for men and women, and with the previously mentioned control values.

answering neither favor nor oppose, yet as the warmth toward Bush increases among

women it increases the likelihood that a woman will answer that they neither favor nor

oppose the use of torture.

Figure 2.1: Predicted Probability of Ambivalence Regarding Torture
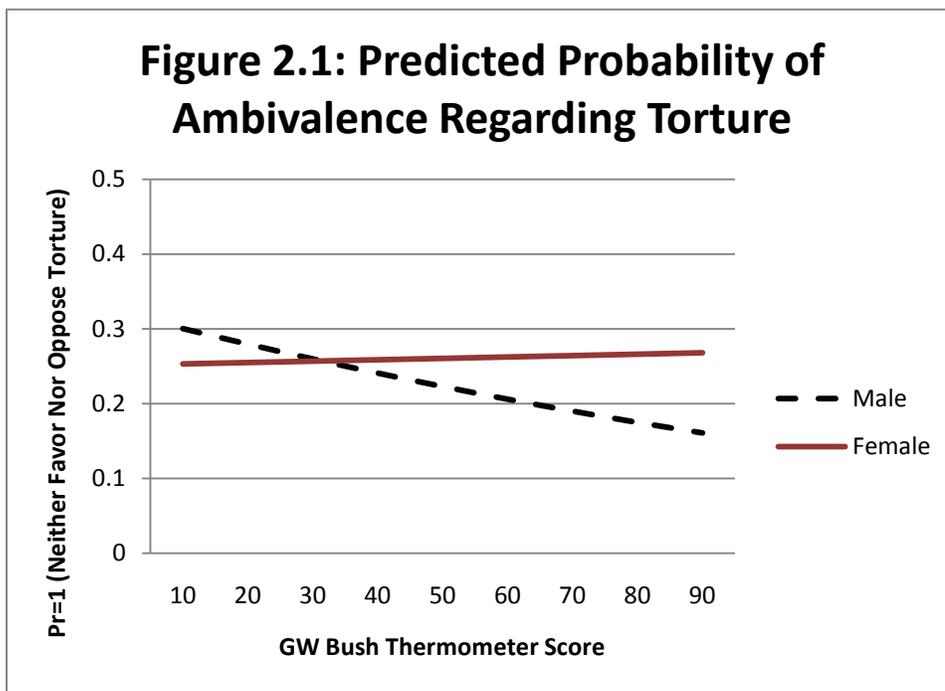
The increase in probabilities as shown in Figure 2.1 It can be seen that for men as

the GW Bush thermometer increases, the probability that they will answer neither favor

nor oppose decreases. For women though as the thermometer score for GW Bush

increases it increases the probability of ambivalence. It basically counters the influence

the support for Bush has on men, and actually slightly increases the probability that the

woman will answer with an ambivalent response.

Figure 2.1 provides a representation of the influence of the interaction variable

between parent, female, and the feminist thermometer. This interaction was expected to

cause some ambivalence toward the use of torture due to the potential conflict in values.

This variable though was not significant in the model, and the figure shows as well that

there appears to be little influence of this conflict in values on an individual's likelihood

of responding in an ambivalent manner toward the use of torture. This is interaction may not be causing any conflict in values. As the previous analysis concerning support for torture showed there seems to be no relationship between support for torture and being a mother or a parent. Therefore this interaction does not cause any conflict in values as the previous interaction between the Bush thermometer and female variables.
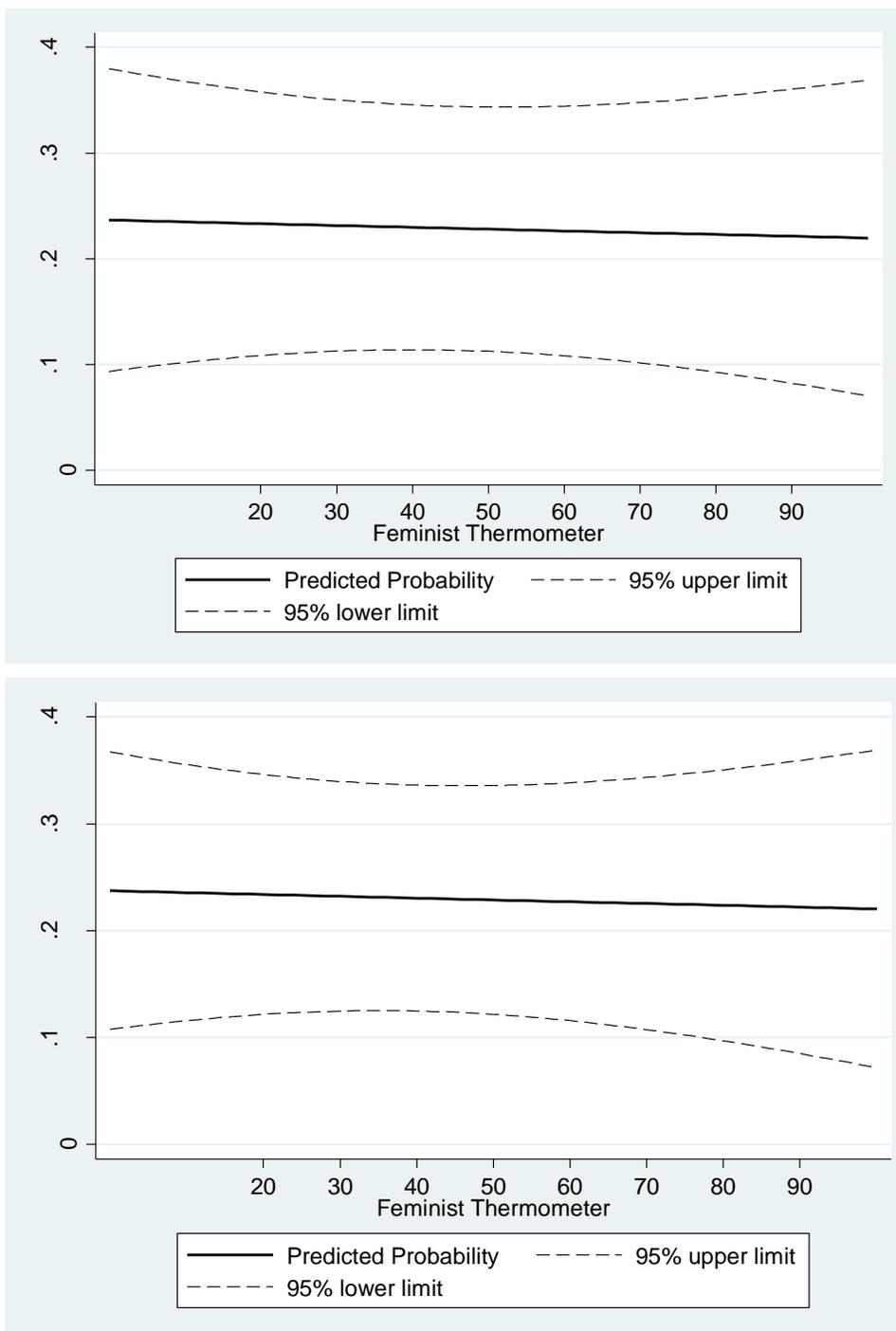
Figure 2.2: Probability of Ambivalence of Parents by Feminist Thermometer Changes

The Gender Gap and Neither Favor nor Oppose Torture

This analysis has shown there is no gender gap in the neither favor nor oppose the use of torture response. Women are as likely as men to state their attitudes toward this

policy. This is in opposition to some of the past research that has shown that women are less likely to actually state their preferences toward specific policies, and might consider themselves less knowledgeable. This could show the results of women becoming more incorporated in the workforce, politics, and community. This allows women to develop the skills and knowledge to make judgments about the appropriateness of specific policies and allows them to be willing to express these policy preferences.

2.6 Conclusions

Conclusion

The analysis has shown that there does appear to be a significant gender gap in the support for the use of torture. Women, even controlling for feminist views and other variables, appear to be more likely to oppose the use of torture. The gender gap between men and women has been recently researched in many different policy areas, yet as policy changes there is a need to analyze whether this gender gap remains intact or disintegrates. The policy of torture is a perfect policy to analyze how the gender gap may have changed, or how it may respond differently to different type policies. This gap in support for torture remains even after controlling for feminism and other demographic factors. Women still appear to be less supportive of the use of torture than men are. This finding seems to provide evidence of the fact that women may be socialized in very different ways or that women really do speak with a different voice as Gilligan (1982) suggested. Women may simply be much less comfortable condoning such violence against anyone, and they may be able to empathize with these individuals much better than men. This holds even for women who might perceive a danger to their families. This difference in attitudes could point to the future of government when women are included in more equal rates, this inclusion of women could likely change many of the fundamental policy goals of the US.

A second interesting finding of this research is that women seem quite willing to express their views toward the use of torture; they were no more or less likely than men to answer that they neither favored nor opposed the use of torture. This result points to

the confidence among women in their political knowledge and confidence in regard to their policy positions. Yet there was some support for the idea that cognitive dissonance may cause individuals to answer in ambivalent ways, as the interaction between women and the GW Bush thermometer showed. This conflict in values may increase the level of ambivalent responses because individuals cannot connect these conflicting values.

Future Research

This study has several limitations that could be addressed in future research. First the ANES data from 2008 does not include a variable that allows for the measurement of whether an individual has a female or male child. This could be an important component in a mother's support for torture. A woman might view risks differently for her male child than her female child. Additionally the 2008 year could be an outlier. An inclusion of more years into this study, if the issue of torture remains one of political interest, is necessary to ensure that the results are not simply a reflection of the 2008 election year where political interest and activity was much higher than in most years. Lastly, as previously discussed the measure for feminism needs to be explored in more detail. The feminist measure included in this model may not be accurately capturing the concept of feminism.

The areas for future research are large. As mentioned previously there has not been a thorough analysis of individual's attitudes toward the use of torture against terrorists. These attitudes should be explored further, while the Obama administration has banned the use of these interrogation methods there is still discussion of this by politicians. This ban by President Obama may only last through his administration. The use of torture has never before been an accepted and publicly discussed topic of public

policy in recent US history, and yet somehow the public has found itself in a position of watching political elites discussing this as if it is as common of a debate as welfare funding or social security. Not only does there need to be research that analyzes individual's attitudes and feelings about this for the study of public policy but also for the study of human rights. More than 50 years of expanding the norms of human rights could be seriously damaged by the growing public acceptance of this public policy that clearly violates an individual's human rights.

Future research could also focus on how individuals may conceptualize this type policy differently than other public policies that are related to the use of force. As some authors have discussed understanding target populations is important in understanding how a policy is designed and implemented (see Schneider and Ingram 1990a, 1990b, 1993). The way that the target population of this policy of torture has been constructed is quite interesting and merits further attention. A policy such as torture is designed and publicized as having only a negative impact for those that are in many ways quite dangerous, and in the eyes of Americans quite deserving of such treatment. This conceptualization can be quite detrimental to the future of human rights in the world today.

CHAPTER 3: WOMEN IN THE WORKPLACE: CRITICAL MASS AND CLIMATE
CHANGE

Women in many modern nations have become more and more incorporated into the workings of the economic system at all levels. Women have become a large percentage of the labor force in the United States and while some industries are still highly segregated, hardly any industry is free of some female presence. The presence of women in industry ranging from corporate and public to educational and scientific hardly means that women's experiences in these industries are the same as men's. While women may be forced to compete even more to gain these positions, once they reach prominent positions they may not be welcomed by their male colleagues. Several studies have discussed the climate for women in business as well educational sectors (Backhouse, 2003; Dansby and Landis, 1998; Kanter 1977). Many assume that the climate on college campuses must be far more inclusive than that of a corporate environment or other more business-oriented environment. This study uses data from a large Southeastern college to analyze the climate for women faculty on campus. Not only is this study concerned with the climate for women on campus, but how this climate, or sense of inclusion, differs by department and the female representation in this department.

3.1 Introduction

The growth of the female labor force has been significant in the past fifty years. Women have been able to obtain entry into almost every profession in the United States. With this insurgence of women into the work sphere of American life there is a need to re-evaluate the common perceptions of how the corporate and business worlds are organized. Yet most of these calls for re-evaluation have fallen somewhat flat. The corporate and business worlds have tended to overlook the masculinity of their overall culture, and rather have focused on specific issues that women have problems with in the workplace such as sexual harassment, pregnancy, and physical differences between men and women that may influence working conditions (Wallace 1982). Certainly such legal issues should be addressed but beyond the concrete issues of harassment there is a somewhat larger issue, which drives the research question for the present study. In particular, how do women interact with men in the culture of the workforce, do they have the same amount of power and inclusion as their male colleagues? Or, are they treated more as tokens than as individuals?

This paper will attempt to analyze the climate for women in a large southeastern university. The analysis is based on Kanter's (1977) ideas concerning the critical mass of women that is needed in order for those in an organization or group to begin to see women as individuals, not merely as stereotypical tokens of their group. The university environment is not expected to differ in any way from other organizations that have traditionally been controlled by men (Monroe, et al. 2008). In order to answer the

questions, first in this paper, there is a review of the literature that considers the climate for women in different organizations. This literature review leads to hypotheses which will be tested herein. The hypotheses are tested with data concerning women's appraisal of the climate for women at a university. The data will allow for a test of whether the climate for women is more positive in departments with a higher representation of women.

3.2 Literature Review

Women in the Workforce

Women's entry into the professional world started slowly during WWII and has been progressively, with minor adjustments, widened in scope. Women are a significant part of the workforce in the US. While this workforce still remains highly segregated and income differentiated, women have successfully been able to move into various levels of industry and management (Department of Labor 2008). According to the US Department of Labor's Women's Bureau, women comprised 46.5% of the labor force in the US in 2008. Women's earnings were 80% of men's in 2008 and were highly overrepresented as nurses (91.7%) and elementary and middle school teachers (81.2%) (Department of Labor 2008), while only making up 2.4% of the CEO's in 2008 in Fortune 500 companies (Fortune 2008) and only rising to 3% in 2010 with an addition of three women CEO's (Fortune 2010). Due to this transformation of the workforce, researchers have attempted to analyze whether women are treated the same as men in these positions that have been traditionally held by men, and whether or not women hold the same level of power as men in this positions.

Kanter (1977) in her landmark work, *Men and Women in the Corporation*, evaluated how women functioned in a large corporation. Women in this corporation made up a small percentage of the exempt labor force, usually consisting of only one or two women in each large working group. While Kanter's (1977) work evaluates the entire organizational processes of one corporate environment, she contributes greatly to the understanding of how women work in a highly segregated environment. Women on

one hand made up almost the entire secretarial workforce. This dominant secretarial role

of women in the corporation framed how women were expected to fit into the

organization in all the job position they held. Kanter (1977) showed that secretaries were

very dependent on their boss and their personal relationship with him. Due to the low

level of skills required for secretaries the best way for these secretaries to secure their job

position was to work through the corporate culture that resembled a system of patriarchy.

Kanter (1977) notes that "a boss came to depend on the secretary not for interchangeable

technical skills . . . but for the unique knowledge of him and for the unspoken

understandings that developed about how the work was to get done" (Kanter 1977 pp.92-

93). Kanter's (1977) insights derived from those women that were able to make it into

exempt positions, management and salaried positions, provide an understanding of how

the actual number of women or minorities of any group in an organization function.

Kanter (1977) found that women that only make up a small percentage of workers are

seen as tokens rather than individuals. By "tokens" she means that they are seen as

representatives of their group and their treatment by others (men) is limited by this

stereotypical role. Kanter (1977) notes that women can respond to this treatment in

several different ways, but all of the potential responses are necessary only because of the

limited number of women in an organization. Kanter (1977) argues that women are not

able to function in organizations in the same way as men until there is a "critical mass" of

women. While Kanter (1977) notes that the actual representation of women needed to

reach this "critical mass" is unclear. There is the argument that only one or two women

that are in a group of individuals that routinely work together will still be seen as tokens

even if they compose 15% or 30% of the working group (Kanter 1977).[20] This work

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[20]The actual number or percentage of women needed to reach critical mass cannot be exactly specified.

provides insight into the way that women are forced to function in a male dominated environment. Kanter (1977) shows that the organizational processes make it difficult for women to succeed in any industry that is dominated by men, and in positions in which women had not reached critical mass.

The actual work functions are not the only part of a workplace environment that influence women differently than men, the perceived climate or the way that women feel toward their workplace also influences whether women choose to stay at an workplace or leave the job or job market altogether. Kanter (1977) discusses the climate for women in this corporate world, but other authors have conducted even more recent studies illustrating that climate for women in many different areas of American industry, including within academia.

The climate for women can have important implications, from the hiring of women to their work success, and can permeate all areas of the job, including interaction with "clients". Henehan and Sarkees (2009) describe a "chilly" climate in an academic department as one where there is a "lack of respect by students (or students expecting women to do special favors for them), not having adequate resources, not being asked to collaborate with colleagues, and being outside the department network" (p. 437). The negative climate of an organization can be the result of negative interactions with co-workers and the clients (students) which are served by the organization. The masculine culture of the organization can limit women's ability to succeed, and also negatively affect her overall work experience. In an experiment conducted on business students,

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Kanter (1977) discusses the idea that a concrete percentage is not appropriate due to the fact that the size of the group may make the percentage of women in the group look large, but if this is only one woman she still may be treated as a token. In addition to this if there are only two women in a group they also may be treated as tokens, and may further fuel the difficulty by the competition that their token status places them in.

Katz (1987) finds that students will believe that women are less qualified for a job if the business environment is framed as being masculine as opposed to a more egalitarian environment. A more egalitarian company was conceptualized as having the company management evenly divided between men and women and where there was not an emphasis on the masculinity of the organization. In this experiment the students were shown information about a company that was evaluating potential applicants. The students were asked to assess how well these different "candidates" would fit with the company. When the climate was framed as masculine, men were chosen to fit better with the company. When the climate was framed as egalitarian, students were just as likely to suggest men as women. In the experiment, the researchers also asked the students to offer a salary to the potential applicants; men were offered a higher salary in the masculine company whereas women were offered more in the egalitarian environment (Katz 1987). This appraisal of fit with the culture of a company goes beyond the corporate environment and can even be evident in the public environment.

An unwelcome climate for women is not limited to the business environment. Backhouse (2003) discussed the public, media and government responses to a female judge (L'Heureux-Dubé) in Canada who made a decision which overturned a decision made by a lower court judge that contained sexist justifications in a sexual assault case. The media and the government created a very negative environment for the female judge who made rulings that seemed too "feminist." Backhouse (2003) noted that "newspapers also published voluminous, relentless personal attacks on L'Heureux-Dubé, who was explicitly derided as a feminist" (Backhouse 2003, p. 172). It seemed clear by the media and public response to the case that being a feminist on the judiciary or in reality

analyzing cases from a "female" perspective, free from stereotypes that depicted female

victims of assault as "asking for it" and male defendants as boyish and harmless, was not

condoned (Backhouse 2003).[21]

In addition to examining the climate for women and what factors might limit

women's behavior, other authors have analyzed the role that increased representation or

increased numbers of women belonging to a group may have on changing the perceived

climate for women.

Dansby and Landis (1998) found in an analysis of 190 Army units that, for

minority women, increased representation in their Army unit increased their perception of

an "equal opportunity" environment, yet this finding did not hold for Caucasian women.

Also, contrary to expectations, women with higher education levels perceived the climate

to be better than those with lower education levels (Dansby and Landis 1998). While

differences in climate may have an impact on personal job satisfaction and the ability of

women to integrate into an organization, a negative climate can also have an impact on

work performance and the ability of women to function in their positions. Dansby and

Landis (1998) argue that women may be limited by their perceived "token" status into

certain modes of behavior that can severely limit their ability to be as productive and

successful as men. On a micro level, this can negatively impact individual women. This

can also hurt the organization overall by causing lost productivity and increased turnover

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[21] For the case in question the woman who was alleging the sexual assault was perceived an unable in many
ways to not consent to the sexual advances of the defendant due to her lifestyle, which included a child out
of wedlock, and cohabitation with a male partner. In sum her promiscuity was seen as a defense to the
actions of the defendant whereas the judge who first decided the case "depicted Ewanchuk's advances as
'clumsy passes' furthering 'romantic intention,' which were more 'homonal' than 'criminal' "
(Backhouse 2003, p. 170). It was this discriminatory perspective that framed the woman as "asking for it"
and the male defendant as boyish almost that Claire L'Heureux-Dubé reacted negatively toward in her
opinion.

which will lead to increased training costs, increased recruitment costs, and overall a lower level of specialization that long tenure at a company creates.

3.3 Theory and Hypothesis

Climate and Academia

How does the climate for academia compare to that in other organizations? While some may believe that a university should be ahead of other organizations, in actuality, many of the fields in academia have been dominated by men and this has created much the same environment for women in high level positions such as professors, as any other field. There is very little research that evaluates that climate for women in academia. Most of the research that has been done looks at individual departments or fields, and is qualitative rather than quantitative. A "chilly climate" exists for women in academia, especially those women in fields that are still dominated by men such as Science, Technology, Engineering and Math, referred to as STEM fields. This negative climate may start well before many of them actually enter the professional ranks of the academic field. Hall and Sandler (1982) discussed this overall climate for women students, and the possible repercussions of this negative treatment in the classroom. A negative climate for female students in these fields could keep women from pursuing a career in academia but it can also model behavior for male students, who may perpetuate this treatment of women (Hall and Sandler 1982). In addition to the negative influence that this environment has on women in academia, it can also further this behavior by its impact on male students, who see male professors acting in a particular way toward women students and this models a certain appropriate and accepted way of interacting with women in their professional environment (Hall and Sandler 1982). Some of the ways that this negative environment is created by focusing on women's physical attributes, women's

comments in class not being acknowledged, mentors spending less time with women, and encouraging women to take other tracks since they will likely get married (Hall and Sandler 1982). While these are only a few of the ways that this subtle climate in the classroom can influence women, this constant behaviors can have a serious impact on women's perceptions of their own abilities as well as men's perceptions of women. In their report Hall and Sandler (1982) note one Ph.D. student's comment that "[y]ou come in the door . . . equal but having experienced the discrimination – the refusal of professors to take you seriously; the sexual overtures and the like – you limp out doubting your own ability to do very much of anything" (Hall and Sandler 1982, p.1). Hall and Sandler note that these attitudes can influence all women on campuses, yet women in predominately male fields are much more likely to experience this sort of "chilly climate." Thus, combined with societal pressures that make women feel they are inadequate for such professions and the climate for women in these professions women are discouraged from pursuing degrees from these masculine-dominated fields (Hall and Sandler 1982). Hall and Sandler (1982) trace the origins and perpetuation over time of some of this negative climate in academia. The consequences of this environment may be in faculty interaction with other faculty members.

The discriminatory attitudes and behavior of male faculty can be very subtle, they do not have to include events like sexual discrimination and overt sexual harassment. Rather, a climate that devalues women's work in the department and subordinates women to particular roles in the department can have a serious impact on women's ability to succeed in an academic environment. Henehan and Sarkees (2009) discusses the climate for women in the field of International Relations. They point to the fact that there appears

to have been some movement toward a less negative environment for women, yet there are still some negative environmental factors in this field. Some of the major changes that they emphasize have been the change from women being worried about just making it in the field to actually figuring out how to balance their family responsibilities with the responsibilities of the academic environment. While many women saw improvements in the climate from 1995 to 2005, women still felt like it was harder to advance in their profession than it was for men. Interestingly, this research indicates that men—in many ways -- feel like there is little or no discrimination for women, yet women still feel like they are treated differently (Henehan and Sarkees 2009).

Several studies have found that women faculty in many departments feel that they experience a different work environment than men. In an analysis of professors in sociology departments at several different universities, Monk-Turner and Fogerty (2010) found that the work environment in a department was a significant indicator of a person's productivity level. This has important implications for women's advancement in academia. If women's actual productivity is negatively influenced by climate, the success of women in academia is stunted. Monroe et al (2008) find that gender inequality exists in political science departments. She and her colleagues find that the overall climate in departments can be quite negative toward women; in many ways the organization, in formal and informal ways, can be quite biased in favor of men's perceived life cycle and it can be quite difficult for women to live up to the same requirements. As Monroe et al. (2008) discussed in their work it may not simply be the job requirements that make it difficult for women, but how these job requirements conflict with the socially-constructed requirements of women, specifically women's role of child rearing and also the caring

roles for parents. Monroe, et al. (2008) notes that "the conflict of family and career is centrally a social issue, *potentially* as constraining on men as on women, but in practice resting largely on female shoulders." (p. 222). Academic jobs are no different in this respect from others jobs, one of the main impediments to women is the expectation by the institution that individuals have "wives" at home to take care of the family responsibilities. While women have been able to increase their education and access, they have not been able to change these attitudes toward the family responsibilities and the roles of women, which make it difficult for women to succeed.

The literature has shown that the climate of an organization can have a serious impact on the success of women in these departments. Yet beyond the individual harm that this inability for women to succeed has, a negative climate can perpetuate the segregated nature of an industry. This segregation can have a long term impact on women's role in society as well as future levels of inequality between men and women. In the academic environment a negative climate for female students can have an impact on the way that men and women behave in organizations beyond the academic environment. The changing access of women in many different industries, and clearly in the university requires that there be an evaluation of whether the climate toward women has changed due to their increased incorporation. Where the representation of women in academia has changed it is important to evaluate whether Kanter's (1977) work does prove to be correct, that when women are no longer tokens the climate for women in that organization will change. The present study attempts to ascertain whether there is a relationship between the representation of women in a department and the climate for women. A theoretical reason why one might expect a difference is drawn from Kanter

(1977): a certain "critical mass" of women in an organization (in this study, a university department) should lead to a less negative climate for women.

The representation of women in academia is quite large overall, yet varies significantly by department. According to the US Department of Labor (2004) women made up just less than 50% of the labor force at postsecondary institutions in 2004. This number though is obviously skewed by actual department and position; women make up much smaller percentages in STEM fields (Jackson 2004, Kohlstedt 2004). At some universities women make up close to 20% in an Engineering fields (Jackson 2004), the variations can be quite large. In this present study at the University of North Carolina at Charlotte women made up only between 4% and 12% in 2008. The STEM fields have traditionally been less inclusive of women than other fields. There are multiple explanations as to why this happens. The number of women earning Ph.D's in these fields are lower than the number of men, where in the 1970's and 1980's Ph.D's earned by women in Engineering were in the single digits to 2004 where women earned close to 20% of the Ph.D's in Engineering (Committee on Maximizing the Potential of Women in Academic Sciences and Engineering 2007). Yet this increase is still well below the number of Ph.D's earned by women in the Social Sciences in 2004 which was above 50%.

The problem with women in these fields is not only the number of women that receive Ph.D's but also in the recruitment and retention of women into these historically male-dominated fields. These fields are prestigious and historically women have been excluded from these fields (Kohlstedt 2004). The exclusion from these fields seems in many respects was quite deliberate;women were seen as outsiders if they were able to

make any inroads, and those women that did were held to a different standard. It was acknowledged by many in these fields that "of course they would hire a woman, if only they could find a Marie Curie" (Kohlstedt 2004 p.4). While the historical, social and economic bases for this exclusion are beyond the scope of this present study, many researchers have found evidence of this consistent exclusion of women from the STEM fields (Jackson 2004, Kohlstedt 2004, Committee on Maximizing the Potential of Women in Academic Sciences and Engineering 2007). A report on the status on women in STEM fields notes "scientists and engineers who are women or members of racial or ethnic minority groups have had to function in environments that favor – sometimes deliberately but often inadvertently – the men who have traditionally dominated science and engineering" (Committee on Maximizing the Potential of Women in Academic Sciences and Engineering 2007, p.3).

The present study analyzes the role that increased representation of women in a university department may have on increasing perceptions of climate among women in that department. With more women holding what were once "typically male" positions within an organization, there should be a less negative climate for women. With more women holding these positions, it may be more difficult for women to be viewed as tokens and treated as representatives of their group rather than individuals (Kanter 1977). The data for this research is cross-sectional and the theory presented by Kanter leads to the hypothesis for this study:

H1: In comparing female professors, those housed in departments with a higher percentage of women are expected to report higher climate scores.

In this analysis, an interaction is expected between the percentage of women in a department and whether the person is a female. This interaction is expected because more women in a department will lead to less stereotypical behavior toward women in the department. In addition, the masculine atmosphere in the department should be changed with the inclusion of more women.

This study adds an important piece to the understanding of the climate for women in university departments. Most previous studies have evaluated the climate of the university overall for women, specifically noting that STEM fields are less likely to provide a positive climate for women. The causal mechanism for this difference in climate has remained somewhat unclear. It is stated or insinuated that this may be due to the masculine environment or the lack of female representation in that field or area of study. Yet this obviously leads to the question of whether, today in a more equal society, is this still true. By comparing departments a test of the role that women in departments has can be conducted. This can help to provide insight into two different questions. First, does a critical mass of women actually cause a better climate for women? Second, related to the previous question is it actually the representation of women in the department that causes this negative climate for women or may there be some other cause? This causal link between the representation of women and the climate for women has been assumed in most of the research, without any thorough analysis of this. The purpose of the present study is to determine if this causal link does exist, when other individual factors are controlled for.

3.4 Data and Methods

Data and Methods

The data for this analysis comes from the Higher Education Research Institute

(HERI) survey of more than 400 professors (both men and women) at the University of

North Carolina at Charlotte in 2008.[22] This survey covers many different topics related to

job satisfaction, university environment, university services, and teaching methods. There

are several questions from this survey that can be used to analyze the perceived climate

for women on campus. The HERI study is a national survey of faculty that is conducted

by the University of California at Los Angeles. This survey is conducted every two years

during the school year, normally between August and March, during the typical school

year. In the case of the data used for this study the surveys were conducted between

August of 2007 and March of 2008.[23] The actual survey is included in Appendix B. The

survey was sent to the entire faculty at UNCC.[24] Some descriptive statistics are included

in Table 3.1 of the faculty that responded to the survey.

The percentage of women in 2007 in departments at UNCC ranges from 0 to 100,

with a mean of 42.44% and a standard deviation of 10.23.[25] This is a slight increase from

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[22] This HERI study is national and surveys many universities in the United States, but the present study only has access to UNC Charlotte data.

[23] The Administration document can be found at the following location
<http://www.heri.ucla.edu/PDFs/surveyAdmin/fac/fac10AdminGuidelines.pdf> on the Higher Education Research Institute website. The survey was a web based survey where individual's were sent emails requesting their participation in the survey. HERI is housed at the University of California at Los Angeles, they received IRB approval through this institution to complete the survey.

[24] According to the UNCC Institutional Research office the number of full-time faculty at UNCC for the 2007-2008 school year is 938. The total N for the survey is 420, making the response rate about 45%. Forty-two percent of respondents were female and 58% were male, this is almost exactly representative in terms of the actual percentage of male and female professors at UNCC during the 2007-2008 school year, where females made up 41% of the faculty and males 59%.

[25] This is the actual percentage of women making up each department. So all individuals in a particular department will have the same percentage of women code for this variable.

the representation of women in 1999 with a mean of 34.52% and a range from 0 to 90.

The rank of the individuals was fairly varied with 21 percent full professors, 31 percent

associate professors, 31 percent assistant professors, and 17 percent lecturers or

instructors. The average age in the survey is just below 48 with a standard deviation of

10.56, and the range of ages is between 25 and 73. The representation of black faculty in

the study is quite low, with only 4% of the sample identifying themselves as black. There

was a fairly good number of individuals that do not hold terminal degrees at 18%, and

only 5% of those surveyed responded that they had experienced sexual harassment at

UNCC. About 31% of the faculty resided in STEM departments, yet only 8% of the

faculty were female and were in a STEM department. The years that an individual had

been at UNCC ranged from 0 to 38, with an average just above 10. A somewhat large

amount of individuals, 49%, had considered leaving UNCC.

Table 3.1: Descriptive Statistics of Variables used in Analyses				
Variable	Observations	Mean	Min	Max
Values Congruent	415	2.88	1(Disagree Strongly)	4(Agree Strongly)
Teaching Valued	419	3.22	1(Disagree Strongly)	4(Agree Strongly)
Research Valued	416	2.92	1(Disagree Strongly)	4(Agree Strongly)
Climate[26]	412	-4.66e-17	-3.62	1.62
Female	419	0.42	0	1

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[26] This climate measure if the index created with factor scores of the three questions in Table 2.

Table 3.1: Descriptive Statistics of Variables used in Analyses (cont'd)

Percent Women 2007 in the Respondent's Department	392	42.44	0	100
Percent Female Full 2007[27]	392	22.80	0	100
Percent Female Associate 2007	392	33.01	0	90
Percent Female Assistant 2007	392	52.08	0	100
Percent Female Lecturers 2007	392	56.50	0	100
Percent Female Women 2003	392	39.79	0	90
Percent Female Full 2003	392	19.10	0	100
Percent Female Associate 2003	392	34.59	0	100
Percent Female Assistant 2003	392	48.45	0	100
Percent Female Lecturers 2003	392	56.89	0	100
Percent Women 1999	392	34.92	0	90
Percent Female Full 1999	392	20.46	0	100
Percent Female Associate 1999	392	30.12	0	100
Percent Female Assistant 1999	392	48.34	0	100

[27] Each Percent Women or Percent Female Full, Associate, Assistant or Lecturers refers to the percent of women total or at a specific rank in the respondents department.

Table 3.1: Descriptive Statistics of Variables used in Analyses (cont'd)

Percent Female Lecturers 1999	392	50.08	0	100
Age	408	47.66	25	73
Rank	420	2.55	1(Lecturer /Instructor) [28]	4(Full)
Black	420	0.04	0	1
Non –Term Degree Holder	420	0.18	0	1
Sexually Harassed	420	0.05	0	1
STEM	414	0.31	0	1
STEM*Female	414	0.08	0	1
Years at UNCC	409	10.18	0	38
Considered Leaving UNCC	420	0.49	0	1

Independent Variable

The independent variable of most interest for this analysis is the interaction

between the percentage of women in 2007 and whether or not the respondent is a woman.

It is hypothesized that women will be influenced by the higher percentage of women, and

that men's perception of climate will not be influenced by this. Women may be

particularly influenced by the higher representation of women in the department because

the women in the department could create a more equal environment that values women's

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abilities.[29] In departments with a higher percentage of men, women may be treated as

tokens and this could cause women to feel a less positive climate exists for them in the

department. The percentage of women in each department ranges from a low of 12.5

percent to a high of 100 percent.[30] In addition to this measure, lagged variables for the

representation of women in 2003 and 1999 are included. These lagged variables are

included in order to measure whether there might be some lagged influence of women,

where it might take a few years of female representation to influence the environment of

the department and the perceptions of climate by women in that department. The

interaction between female and the lagged percentages of women is also included in the

model.

Dependent Variable

The dependent variable for this analysis comes from three different questions on

the survey that can be used to assess the climate on campus. The questions are included

in Table 3.2. They each are measured using a four-point scale where 1 is equal to strongly

disagree and 4 is equal to strongly agree. A index is created using factor score that is a

measure of the climate for women on campus, with high scores indicating a better climate

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[29] The percentage of women in the department was calculated using the data from Institutional Research at UNCC provided in the following location < http://ir.uncc.edu/irmainpage2/fbindex.html>. The percentage of all professors is used to construct this measure, this includes the number of lecturers. The decision to include lecturers is made because these individuals are members of the department sharing much of the same responsibilities and roles as tenure-track professors. While their rank in the department may be different they are still in the same sort of position, as related to Kanter's (1977) work if this women were looked at in relation to the corporation she studied they would still be considered management or in exempt positions that were normally dominated by men, rather than secretaries, the position that women normally held.

[30] The Appendix provides and explanation of the department coding and how this compares to the HERI coding. Some HERI department specifications did not match any UNCC departments, for these codes the percentage of women is coded as missing. Due to the fact that HERI is a national level study some of the codes did not match exactly, yet every attempt was made to ensure that the individuals that responded within these departments were matched with the actual department they are in.

and lower scores indicated a more negative climate.[31] These four different measures appeared to fit together fairly well with a Cronbach's Alpha of 0.683. These questions attempt to measure the concept of an individual's perception of climate for themselves in the department. The first two questions ask how much their research and teaching is valued by the department. If the individual feels that their research and teaching is not valued by the department, this shows that they have some negative ideas concerning the climate in the department. As the research by Hall and Sandler (1982) illustrated, women students were seen as less competent in class and their comments in class were not given as much attention as male's comments. This sort of behavior could be mimicked in the university department. Women's research may be seen as less important, their teaching may be viewed as less sophisticated or effective as the male professors, and women may perceive these negative perceptions of their work. It is also assumed that if the person feels that their values are the same as those of the department they will feel that the climate for the department has a positive climate. An important aspect of this score to recognize is that it has no connection with perceptions of climate for women as a whole in the department. Rather, the score only measures the perceptions of an individual about the climate of the department for that individual (woman or man).

Table 3.2: Questions used to Construct Climate Factor Score
My research is valued by my department
My teaching is valued by faculty in my department
My values are congruent with the dominant institutional values

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[31] A principal component method with no rotation is used for the factor analysis and a regression scoring method is used to extract the scores.

As Table 3.2 illustrates women are more likely to have negative views of the climate in their department than men. Women are more likely to disagree and disagree somewhat with the three statements used to measure perceptions of climate, meaning they are more likely to feel that their teaching and research are not valued and that their values are not congruent with those of the institution. Also, men are more likely to agree with positive perceptions of climate in their department than women are. Women are more likely to disagree with a positive climate that men are, for every part of the climate measure.

Table 3.3: Percentage of Male and Female Responses to each Climate Question								
	Disagree		Disagree Somewhat		Agree Somewhat		Agree Strongly	
	Male	Female	Male	Female	Male	Female	Male	Female
Research Valued	5.79	9.83	12.81	19.65	57.44	49.71	23.97	20.81
Teaching Valued	2.90	6.21	6.64	10.73	51.45	44.07	39.00	38.98
Values Congruent	4.18	6.29	12.13	22.86	67.68	57.14	15.90	13.71
Note: Percentages represent what percentage of male (or female) that answered the question this way. Where the useful comparison is between what percentage of the females surveyed responded each way and what percentage of the males surveyed responded each way.								

Control Variables

Gender[32]

Whether or not the person was female is important to include in the model. This variable is coded 1 if the respondent is female and 0 if the respondent is male. Women are expected to experience a negative climate, whereas men likely create a climate in the department that is masculine and thus more positive for men (Hall and Sandler 1982). Therefore there is expected to be a negative relationship between female and the perceived climate in the department. The female measure is also a constituent term in the interaction effect that is the main independent variable for the study, where a 0 value in the interaction term represents a male respondent in a department with 0% female representation.

Rank

This variable measures what academic rank the individual has. It is hypothesized that this will be a factor in whether or not the individual feels that the climate is negative or not. Presumably if a person has a higher rank they may have more stake in the structure and climate of the department and may perceive the climate of the department in a more positive way than someone with a lower rank. This variable is measured from 1 to 5, where 1 represents an instructor or lecturer, 2 represents an assistant professor, 3 represents an associate professor, and 4 represents a full professor. This variable is expected to have a positive relationship with climate; as an individual's rank increases so does their perception of climate.

Rank*Female

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[32] The female measure was interacted with Age, Degree, Leave UNCC, and Years at UNCC. None of these interactions were significant and there was no theoretical basis to keep them in the model, thus they were removed from the final model.

This interaction is included because rank might have a different influence on men than on women. While it is unclear what exactly this influence might be it is important to include this relationship. Women may feel more validated than men by increasing rank, and this may increase their perceptions of climate, where men may be more confident and valued overall and rank may have no influence on their positive feeling of climate.

Age

The age of the respondent is expected to be positively related to the perceptions of climate. If an individual is older they may be more accustomed to a particular structure and norms in a department, and they are less likely to believe that this set of norms and behaviors is negative or different from what it should be. This variable is measured in a person's age in years.

Race

Whether or not an individual is black is considered to have an impact on the perception of climate. As Kanter (1977) noted, any underrepresented group is likely to be treated in a particular way just by the very nature of their token status. If the respondent is black they are expected to have negative views of climate due to their underrepresentation. This variable is measured 0 if the respondent does not identify themselves as black and 1 if they do identify themselves as black.

STEM*Female

This dummy variable measures whether a female is part of a STEM field. It is an interaction between the dummy for a STEM field and female. Previous research has shown that these fields are particularly hostile toward women (Committee on Maximizing the Potential of Women in Academic Science and Engineering 2007). The

departments that are coded as part of these STEM fields are included in the appendix in

the Table 3.6. They follow the coding used by the ADVANCE agencies that are part of a

National Science Foundation (NSF) grant which attempts to help institutions expand their

retention and recruitment of women in STEM fields (ADVANCE 2010). This measure is

expected to have a negative relationship with climate. The STEM dummy is included in

the model but no significant relationship is expected with this variable.

Sexual Harassment

An additional control variable included in the model was the measure of whether

or not an individual identified themselves as having experienced sexual harassment at the

institution, so in this case at UNCC. If the person did say that they had been sexually

harassed at this institution it is expected that this will negatively impact a person's

perception of climate.[33] This variable is coded 1 if the respondent indicated that they had

been sexually harassed and 0 if they said they had not. It is hypothesized that there will

be a negative relationship between sexual harassment and perception of climate.

Degree

This is a dummy variable that measures whether an individual has not received a

terminal degree. If an individual has not received a terminal degree they may feel less

valued by their department due to the difference in their degree from the norm at the

university and their department. If an individual had not received a terminal degree they

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[33] While sexual harassment may seem like a measure of climate, it is different than the measures of climate that are utilized in this study. Usually sexual harassment is the result of an individual in an organization acting in inappropriate ways toward another individual, either male or female. Where this experience likely will taint the way the individual perceives the entire department, it is not reasonable to evaluate the whole department's "climate" for individuals based on the behavior of one deviant individual – deviant at least in the sense of proper professional behavior.

are given a value of 1, and a negative relationship is expected between this variable and climate.

Years at the Institution

The years that an individual has been at the institution is likely related to the climate that an individual feels toward that institution. If an individual does not feel a positive climate they may not stay at that institution for a very long time. Therefore, if an individual has been at an institution for a long period of time, this suggests that they might not have any negative feelings of climate for the department in which she is housed. This measure is simply in years and is expected to have a positive relationship with climate.

Considered Leaving UNCC

This is a dummy variable that indicates whether an individual has considered leaving UNCC. This variable would indicate that a person who had considered leaving UNCC might consider this due to a negative climate felt at the department in which she works. A person that has considered leaving UNCC is given a value of 1, and this variable is expected to have a negative relationship with climate.

3.5 Results

Results

Model 1: Total Percentage of Female Faculty in the Department and Climate

The OLS regression model is significant at the 0.01 level with an F-score of 6.83 and has an R^2 of 0.225.[34] The results of the analysis show that the representation of women in a department does not appear to have a positive impact on the perceived climate for those individuals in the department.[35] The interaction between the percentage of women in the department and whether the respondent is female is not significant.[36] The interaction between the percent of women in the department and the gender of the individual appears to be unrelated to perceived climate for women in the department. This suggests that an increased representation of women in a department does not influence women's perceptions of climate. Women's increased representation may do very little in changing the climate for women in an organization. The lagged interactions were not significant either. Rather than experiencing a negative climate, women do not appear to have lower perceptions of climate than men do overall, the dummy variable for

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[34] For the analysis in this paper the dependent variable is a continuous variable, thus an OLS Regression model is utilized. In addition to this an Ordered Probit model is used for each component of the index. These models illustrated the same results as the Regression model. The Regression model is used for this analysis because it is a better illustration of the complete climate for an individual, rather than using the individual components in three separate Ordered Probit models.

[35] Different specifications of critical mass were used in order to measure whether a specific percentage of women might be a better measure than the continuous measure of the percentage of women. The models using a dummy for 15% of women and 30% had similar results as the one using the continuous percentage of women measure. The only difference is that in the model using the dummy for the 15% threshold the lagged 2003 interaction between female and the dummy for female representation was marginally significant and positively related to climate.

[36] This model does have an issue with multicollinearity due to the lagged percentage of women variables. Additional models were analyzed using only one year for the percentage of women in the department. This was conducted for the years 2007, 2003, and 1999. The models were the same in all respects except the percentage of women in each year was marginally significant and positively related to climate, yet the interaction between female and the percentage of women in the department was not significant.

female is not significant in the model. An individual's age, race, and rank had no impact on the perceived climate. It is assumed, especially for race, that there would be a perceived difference in climate, yet this assumption was not supported. Whether the individual was sexually harassed or not was significantly and negatively related to perceived climate. If an individual was sexually harassed it seems likely they will have a more negative perception of climate than an individual that has not experienced this harassment. While harassment would usually only be the result on one individual's behavior, this still might cause the person that was harassed to have a more negative attitude toward the climate of the institution. The control for whether the individual had considered leaving UNCC was also significant and negatively related to the climate that an individual perceived.[37]

Table 3.4: OLS Regression Model of Climate	
Variable	Coefficient
Percent of Women in Department 2007	0.002 (0.006)
Percent of Women in Department 2007*Female	-0.008 (0.013)
Percent of Women in Department 2003	0.002 (0.010)
Percent of Women in Department 2003*Female	0.004 (0.015)

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[37] There could be an endogeneity problem with this variable. The negative climate in a department might be causing an individual to considering leaving the university.

Table 3.4: OLS Regression Model of Climate (cont'd)

Percent of Women in Department 1999	0.006
	(0.008)
Percent of Women in Department 1999*Female	0.001
	(0.013)
Female	-0.227
	(0.486)
Age	-0.009
	(0.006)
Rank	0.052
	(0.062)
Rank*Female	0.078†
	(0.085)
Black	-0.153
	(0.269)
Non-Terminal Degree	0.035
	(0.153)
Sexually Harassed	-0.837***
	(0.164)
STEM	0.354†
	(0.203)
STEM*Female	-0.553†
	(0.293)

Table 3.4: OLS Regression Model of Climate (cont'd)

Years at UNCC	-0.000
	(0.006)
Considered Leaving UNCC	-0.673***
	(0.089)
Constant	0.396
F	6.83***
R²	0.225
N	372
Note: †p<0.10, *p<0.05, **p<0.01, ***p<0.001. Standard Error in parentheses	

As some of the previous research has also discussed, the interaction between female and STEM is marginally significant with a p-value of 0.066, and is negatively related to climate. This provides support for some of the past research showing that women in STEM departments, that culturally and numerically have been dominated by men, have lower perceptions of climate. This supports the idea that there might be something historically about these fields that might cause women to feel less welcomed, even beyond the actual representation of women in these departments. In addition, the interaction between rank and female was marginally significant and positively related to climate, indicating that perhaps as rank increases women may feel more validated and appreciated.

Model 2 and Model 3: The Percentage of Tenured Female Faculty and Climate

A second set of models are also included to evaluate the difference in the representation of women by rank. If women make up a large percentage of the lower

level professors, their existence might not have as much influence on climate than in a department where there is a large representation of women that are full professors. Two separate models were used measuring the influence of the percentage full female professors and associate female professors on the climate in a department. The first model measures the percentage of the department made up of female full professors and the second model associate professors. The results of these models are presented in Table 3.5, and as in the previous model an OLS Regression was used for this analysis.

The results of the full professor model show that the model is significant with a F-score of 12.69, and an R^2 of 0.217. The overall results of this model though are quite similar to the previous model. The interaction between the percentage of full female professors and female respondents is not significant, and in addition to this, the dummy for female is not significant. This again seems to illustrate that women in general do not have more negative feelings of climate, and that women in departments made up of more female full professors have no different perceptions of climate than men. As in the previous models the sexual harassment controls and the whether the individual had considered leaving UNCC is significant and negatively related to climate. The interaction between STEM and female remains significant. Women in STEM departments do experience lower perceptions of climate than women in other departments.

Table 3.5: OLS Regression Models of Climate by Rank of Full and Associate Professor[38]		
	Model 2	Model 3
	Percent of Full	Percent of Associate
Variable	Coefficient	Coefficient
Percent of Female Professors in Department 2007	0.006 (0.006)	-0.004 (0.004)
Percent of Female Professors in Department 2007*Female	-0.004 (0.009)	-0.003 (0.007)
Percent of Female Professors in Department 2003	0.001 (0.008)	0.001 (0.003)
Percent of Female Professors in Department 2003*Female	-0.004 (0.010)	0.004 (0.006)
Percent of Female Professors in Department 1999	-0.000 (0.007)	0.007 (0.005)
Percent of Female Professors in Department 1999*Female	0.000 (0.007)	-0.005 (0.006)
Female	-0.119 (0.305)	-0.259 (0.327)
Age	-0.009 (0.006)	-0.010 (0.006)

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[38] The percentage of women variable in the first model in this table refers only to the percentage of full professors. In the second model the percentage of women refers only to the percentage of associate professors in the department.

Table 3.5: OLS Regression Models of Climate by Rank of Full and Associate Professor (cont'd)

Rank	0.072	0.061
	(0.067)	(0.066)
Rank*Female	0.063	0.092
	(0.083)	(0.087)
Black	-0.193	-0.168
	(0.268)	(0.255)
Non-Terminal Degree	0.059	-0.074
	(0.169)	(0.165)
Sexually Harassed	-0.865***	-0.831***
	(0.168)	(0.175)
STEM	0.254	0.276
	(0.185)	(0.178)
STEM*Female	-0.688*	-0.600*
	(0.260)	(0.284)
Years at UNCC	-0.001	0.000
	(0.006)	(0.006)
Considered Leaving UNCC	-0.652***	-0.673***
	(0.086)	(0.084)
Constant	0.530	0.665
F	12.69***	6.91***
R²	0.217	0.225
N	372	372
Note: †p<0.10, *p<0.05, **p<0.01, ***p<0.001. Standard Error in parentheses		

The second model, the model that utilized the percentage of women that are associate professors, provides similar results as Models 1 and 2. Again the model is significant with an F-score of 6.91 and an R^2 of 0.225. The results are similar to the model that included the percentage of female full professors in a department, where sexual harassment and considered leaving UNCC are significant in the expected direction. Also, the interaction between female and STEM remains significant and negatively related to climate. The model further shows that STEM departments may provide more hostile and less accepting environments toward women.

3.6 Conclusions

Conclusions

This study does not find support for the theory that the representation of women alone may be the cause of the negative climate for women in university departments. In fact, there is no support for the idea that women experience a lower level of climate in the university compared to men, except in STEM departments. This study clearly may not capture the full climate in a department that an individual perceives. The value of an individual's teaching and research as well as the congruence between their values and the institutions may not be the full picture of how an individual perceives the climate of their department. Yet beyond these considerations this study provides some important insight into the way that women may interact in the university environment and the way that women may perceive it. It could come as somewhat welcome news that women do not feel less valued than men, and they feel as positive of a climate as men, except in STEM departments. This is quite important, and yet may not be generalizable to other universities without further data. This finding though does provide a basis of analysis that should be continued in other universities to evaluate whether these findings persist in other contexts.

Clearly though, a major support for previous studies is that women in STEM departments do feel that their work is less valued and that their values are not shared with the institution. This is an important issue to explore and beyond simply the actual representation of women in these departments. There appears to continue to be an

environment that makes it difficult for women to feel as appreciated and valued in these STEM departments.

While many authors have documented this negative climate for women in academia (e.g. Monroe et al. 2008; Sandler and Hall 1982), the belief that this problem may be fixed by simply increasing the percentage of women in the department may be incorrect or at best, incomplete. In STEM departments, this process may involve much more than simply an increase in women. Rather, individual departments may need to make changes to their institutional culture in order to encourage a more positive climate for women.

Future Research

A clear limitation of this research is the setting. Incorporating more faculty data from different universities could provide a more generalizable picture of the relationship between climate and female faculty at universities. Future research in this area needs to explore whether these conclusions hold when they are expanded to other universities in the United States. It is important to analyze how some regions may be different than others and to control for region-level influences. A multi-year analysis could also be important in attempting to ascertain how the climate for women has changed over the years and whether increasing the percentage of women may have an initial impact, but may not be able to overcome other social and structural factors that may be at work as well.

A more complex view of climate additionally could be incorporated, potentially assessing the social relationships that an individual has in the department. This study has specifically focused on the value of an individual's work, yet there are other aspects of

the overall climate that are quite different but might vary for men and women. In addition, measuring how an individual feels the climate is for women or for minorities might be an important extension. An individual may feel somewhat exceptional and may feel or say that they feel like their work is valued, yet may believe that the climate for women or minorities is not positive. This inclusion might provide more insight into the actual feelings that an individual has for the climate of the department.

CHAPTER 4: REPRESENTATION MATTERS: THE INFLUENCE OF

REPRESENTATIVE GENDER ON GENDER ATTITUDES IN SOCIETY.

Increasing numbers of women running for political office and in political office have been shown to increase political discussion among women and adolescent women. Previous analyses have focused on the United States and Europe, and have focused on behavior rather than attitudes. The present paper is a more encompassing cross-national analysis that examines the connection between women in political positions and equality attitudes toward women. This cross-national study examines the connection between the political representation of women and equality attitudes among individuals. The findings of this research show that an increased presence of women in elected positions increases the equality attitudes that individuals hold toward women. This provides an important understanding about how gender equality attitudes can be changed among individuals, which could lead to less informal discrimination of women.

4.1 Introduction

Worldwide, women have seen an increase in their rights over the past one hundred years. They have been able to go from being forbidden to participate in many of the functions of normal economic and political life to becoming active participants in the business and political communities of most countries. Yet even with these advancements, many individuals worldwide still perceive that women should hold certain, more traditional roles. And, despite many advances, national legislatures have not exhibited a pronounced increase in female elected members. According the Inter-Parliamentary Union the average percentage of female legislators is only at 19 percent (Inter-Parliamentary Union 2011). The question that policymakers should consider is whether this is a problem worth addressing. One part of addressing the question of government involvement is understanding whether such descriptive representation actually makes a difference in the lives of women, and society as a whole, not just by changing policy, but by changing the perceived role that individuals believe women should have.

Many scholars have studied the different factors that might account for the low levels of female representation, with some suggesting positive government actions such as quotas (Dahlerup and Freidenvall 2005; McAllister and Studlar 2002). However, it is useful to know what the possible influence of a larger percentage of female legislators might have on women and men regarding attitudes toward equality. These possible positive impacts could provide evidence that additional steps should be taken to encourage women's participation in political positions. Public policies that encourage expanded descriptive representation could play an important role in reducing many of the

negative stereotypes that both men and women hold toward women in many societies. Could this increase in descriptive representation change the way that women view themselves and men view women in society?

The question of what effect women in legislatures have on the female population of countries has not been thoroughly examined, and this is the central focus of this paper. Thus, this paper advances the hypothesis that the more women in a legislature, the more likely both men and women are to express more equal attitudes about women's appropriate place in society. In order to test this hypothesis, this paper reviews the literature on why there needs to be an equal representation of women in government and some of the reasons why women are underrepresented such as decreased income and political resources. Following this discussion is a review of the literature that analyzes the effect that women in leadership have on women in society. Finally, an analysis is conducted utilizing a cross-national, individual-level dataset of 17 countries showing the effect that increased women in legislatures has on the attitudes of both men and women regarding women in society.

4.2 Literature Review

Literature Review

The importance of female representatives in democratic countries has been a significant topic for many social observers. Some have considered it to be a central citizen right in a democracy, while others have simply looked at some of the benefits that it could impart to women in society. Yet conceptualizing and implementing policies to increase women's representation has been a more difficult task than illustrating the need for equal representation. Quotas have been shown to increase the percentage of women in legislatures (Dahlerup and Freidenvall 2005). The increase in women's political representation, whether a result of quotas or not, has also been seen as transferring benefits to women in society such as feelings of political efficacy and interest among women (Atkeson 2003; Wolbrecht and Campbell 2007).

Why more women?

Phillips (2004) advances the idea that in a democracy, descriptive representation is an essential sign of the very existence of a democracy. Her discussion shows that representation by those who are similar to the citizenry is a fundamental aspect of any democratic country. Based on the idea that equality of outcome can be used as a measure of the legitimacy of a democratic government, equal representation of women is an excellent indicator of the opportunities that women, or any minority group in society have. If such an outcome occurs, in this case equal representation, one can reasonably assume that there are equal opportunities in the society (Phillips 2004). Phillips also critiques the suggestion that a government that is not descriptively representative can

effectively make decisions about events about which they have no experience whatsoever. She argues "members of a political community are formed and limited by their experiences, which is part of the argument that all these experiences should gain their voice" (Phillips 1991, p. 167). Yet beyond creating a need for more women to generate democratic legitimacy, researchers have attempted to evaluate some structural and cultural reasons why there might be less women in elected positions than is expected.

Turning to state legislatures in the United States, Hill (1981) finds in a comparison of female legislators in US states that where women were given the right to vote earlier or where there is a public acceptance of them in public positions, there is a higher likelihood that women will gain public office. The strongest relationship is between the percentage of women in the past legislature and the current percentage of women in the legislature (Hill 1981). This study suggests that policies that increase the number of women in political office in the current time period could have a long term influence on increasing the number of women in the future. This increase in future female representation could be the result of citizens being more used to women in power or as the next author might suggest, women would have an incumbency advantage like most men have now.

Schwindt-Bayer (2005) examines the role that incumbency plays in the election of women through a study of a group of countries that are somewhat distributed through different regions. She examines whether incumbency reduces the likelihood of increasing the percentage of women in their legislatures. She finds that states with term limits have a higher percentage of women than those that did not. Also, as previous studies find, a proportional representation system is more likely to have greater female representation

than other systems such as single member district systems (Schwindt-Bayer 2005). Even beyond the structural barriers that might limit women, women may choose not to run for office.

Women in many cultures still live in an environment in which politics is not an appropriate venue or aspiration for women. As many studies have shown, women choose to run for office less often than men do. Fox and Lawless (2004), in their analysis of the candidate pool throughout the United States, found that women with equal qualifications as their male counterparts still consider themselves less qualified to run for political office. Their study strengthens the importance of analyzing what influence more women in political office might have on women in society, might they feel more qualified if politics is not only seen as a predominately male profession? The fact in most countries in the world is that politics is a male profession with only a small percentage of female outliers.

Aside from the idea that more women in a legislature can tell us something about the quality of democracy, scholars have focused their empirical energies on two general areas: what are the policy effects of more women and what are the effects on behavior and attitudes? Many authors have made the connection between policy and female representation. Thomas and Welch (1991) find that women in government have higher self-reported priorities in health and welfare bills than men, who are more interested in business and budgetary policies. This finding is reinforced by other studies as well (Little, Dunn, and Deen 2001; Thomas 1991). While there is limited evidence of women and men voting differently in legislative bodies, the simple presence of women could influence the attitudes and behavior of men and women.

Yet in addition to any actual policies that further the position of women in society, there is a connection between the women that are in elected office and women in society. The society as a whole, especially women, will be influenced by female legislators in ways other than simply the policy choices of these female representatives. The way that this transfer of benefits can be understood is based on the idea that there is an important effect on women living in a society where they see that women are in positions of leadership. As Atkeson (2003) points out, this descriptive representation cues women in society that they have the right to be interested in politics because women have an important voice in politics.

Atkeson (2003) evaluates the role that women running for political office has on the political engagement of women in the United States. She tests the idea that women become more politically engaged when they are cued that this engagement is politically legitimate by a female running for office. In order to analyze this, she evaluates whether women who are exposed to competitive male versus female gubernatorial and senate races between 1990 to 2008 were more likely to be interested and engaged in politics than women who were not exposed to this "cue" (Atkeson 2003). Atkeson (2003) finds support for the cuing role that competetive female versus male races has on women in society. Dolan (2006) in a similar study analyzes the symbolic influence that female candidates might have on how individuals look at senate and house races from 1990 to 2004. In examining women survey respondents, Dolan (2006) finds some increase in efficacy, attempts to influence others, and participation in politics when there is a female versus male political race for the house, both competitive and non-competitive. However, in her study of house and senate races, the sex of the respondent is not consistently

significant, that is, in some areas men and women were influenced in similar ways by female candidates. In senate races the influences were minor and female candidates only seemed to increase voter turnout, only though for women respondents when Democratic female candidates were in the race (Dolan 2006).

Wolbrecht and Campbell (2007) study the role that women representatives have on women's discussion and engagement in politics in Europe. They also examine the idea that women legislators may be role models to adult and adolescent women in society. They find that there is more political discussion with friends among women in countries where there is a higher percentage of female legislators. This result holds for adults as well as adolescents. They did not find a relationship between the representation of women and women talking more about politics with their family. In regard to political activity, they did find a significant positive effect among adolescents, but not among adults. They also found that adolescent girls were more likely to say that they were more likely to be involved in politics when they were in countries with a higher percentage of women in the legislature (Wolbrecht and Campbell 2007).

Wolbrecht and Campbell (2007) provide further evidence that social setting and context are important contributing factors to women's behavior in society, helping to build theory in this area. When women are active in government there is a significant influence on the women in the society. Since social setting matters, when women see very few women as leaders, this will reduce their willingness to talk about politics. Another important contribution of this study is the connection between adolescent girls and female representatives. If the key to the effects of women legislators on behavior is socialization, then one should expect that adolescents would be the ones influenced most

by female representatives, and they would be the ones most likely to become more politically engaged by seeing women in governmental positions, rather than adults. Women in the legislature play a role in signaling women in society that women have a voice in the political system. Yet these studies focus primarily on political behavior, they say less about the actual attitudes toward women's proper role in society.

This study follows the past literature by analyzing the role that women in leadership positions in government have on the equality values in society toward women. While this study builds upon the work of Atkeson (2003) and Wolbrecht and Campbell (2007), it goes beyond by conducting a cross-national analysis that is focused on gender role attitudes rather than political activity. Principally this study analyzes the attitudes toward women in society, not simply political discussion among women. This is an important addition to the understanding of the effect of female legislators because it focuses on how beliefs about what women can and should do are shaped, and potentially changed by increasing diversity in government.

4.3 Theory and Hypothesis

Theory

The study of gender roles has shown that gender and assigned gender roles are hardly stagnant processes, in which the rules have somehow been set and they must be followed. In many ways these roles have historically changed, and are a product of our everyday actions and interactions (West and Zimmerman 1987). West and Zimmerman (1987) point to the creation of gender through our everyday actions, the "doing of gender." They explain that "[g]ender activities emerge from and bolster claims to membership in a sex category" (p. 127).This behavior, rather "acting," comes up with conflicting values at times. In the case of the female doctor or female engineer, their behavior is in conflict with their gender due to their membership in a male profession (West and Zimmerman 1987).This understanding of gender and how gender is created through social interactions provides a basis for understanding how gender and the roles that correspond to each gender can change with more and more conflicts between gender roles and professions.

Authors find that there is a connection between the women that people see in positions of power and political discussion among women (Atkeson 2003; Atkeson and Carrillo 2007; Campbell and Wolbrecht 2006; Wolbrecht and Campbell 2007). Atkeson (2003) shows that women running for office serve as a cue to women in society that their role in the political process is important and legitimate. Yet it is also likely that seeing women in power will not only influence women's political participation, but will also influence the way that both women and men see women's position in society. It is also

important to look at the different role that a female office holder has as compared to a female candidate for office, as Atkeson (2003) did. It seems that achieving the position as well as the length of time they may be in the public position would cause a representative's influence to be greater than a candidate's. Obviously candidates might catch an individual's interest for a short amount of time and they may indeed keep this interest alive if they win and in some, much fewer cases, even if they do not win. Yet women candidates simply running for office that do not win will likely not have an influence on individual's attitudes toward equality and the roles of women. This is why it is important to examine the role that women actually in elected office have on the attitudes toward gender roles. Women who win races show that they have legitimacy as politicians, and they have power in government – both of which female candidates do not have. Again, women who are legislators are in control of many aspects of day to day life. Their influence is quite different than the influence of female political candidates. With women attaining prestigious positions of political power there should be an erosion of paternalistic attitudes in society, attitudes that relegate women to child care and domestic functions. If people see women being successful in public positions such as elected positions and positions of influence in both government and non-government this should change the way that citizens view women's proper role.

This relationship might be moderated by socio-economic factors such as age, education, gender, ideology, religion, and marital status. Individual-level factors have been shown by previous studies to influence an individual's attitudes toward gender roles (Aboim 2010; Harris and Firestone 1998). Individuals that are older or individuals with a lower level of education are likely to have more traditional attitudes toward the roles of

women. Clearly gender roles have changed somewhat over time, yet older people may still hold some of the traditional gender roles that were accepted when they were growing up. Individuals with lower levels of education may be exposed to fewer ideas and fewer lifestyles and therefore could also hold more traditional gender role attitudes. Individuals that are married are more likely to accept traditional gender roles, and these gender roles may be quite important in their everyday routine. Unmarried individuals, who do not deal with the strains of balancing childcare and work, may be more likely to be less traditional. Obviously as well there could be social pressure on married individuals to accept traditional gender roles, if an individual is not married they may not be aware of these pressures. Gender also could influence equality attitudes; women might be more likely to have more equality attitudes, considering the very specific impact that these roles have on their day-to-day lives. In addition the religious and ideological affiliation of an individual may also be related to the individual's attitudes on gender roles due to the ideas about gender roles that specific worldviews, connected to either religion or ideology, might hold.

Hypothesis

This theory leads naturally to the following hypothesis:

H1: In states where there is a higher percentage of women in the national legislature, citizens are more likely to express equality attitudes toward women in society.

With an increased level of women in the lower or single house of a national legislature, women and men are more likely to have more values of equality due to the cueing that women are capable of leadership roles in society. The model also controls for variables that are also important indicators of views toward women's proper place in

society such as age, education, gender, marital status, political ideology, religion, and rural residence.

4.4 Data and Methods

Data and Methods

The data used for this analysis come from the 2002 International Social Survey (ISSP 2002) regarding changing gender roles. The International Social Survey Programme conducts cross-national surveys on differing topics.[39] The ISSP conducts these surveys in a large number of countries using the same questions in each country. This survey is conducted in 34 countries and queried more than 40,000 respondents using simple random sampling and cluster sampling to select the respondents. Only 17 countries are included in the analysis due to missing data for the independent variable or control variables. Most of the countries are in Eastern and Western Europe, but the sample also includes the United States, Australia, the Philippines and Chile. Table 4.3 has a full list of all the countries in the survey and those included in the analysis. The data used to construct the main independent variable—women's representation—is from the Inter-Parliamentary Union. The measure of percentage of women in parliament is taken from the database created by the Inter-Parliamentary Union's Women in Parliament database. This dataset provides year-by-year data on the percentage of women in the lower or single house of the legislature for most countries in the world. For this study the number of women in the lower house is used from the 30th of January 2001 (Inter-Parliamentary Union 2011). The limitations of this research design are most notably the external validity. The number of states that this study covers is less than it could be.

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[39] The following website provides the methodology and the questionnaire for each country. <http://zacat.gesis.org/webview/index.jsp?object=http://zacat.gesis.org/obj/fStudy/ZA3880%20> The codebook is available on the following website and includes detailed descriptions of the data and the specific sampling methods used for each country <http://www.gesis.org/en/issp/issp-modules-profiles/family-changing-gender-roles/2002/>.

Although perhaps this study may be less externally valid than a study which included surveys from every country in the world, such data are not available. The sample does provide a good cross-section of countries of different cultural, regional, political, and economic contexts, which should minimize this concern to the extent possible

A multilevel linear regression model is used to analyze the connection between the representation of women and equality attitudes in society. A multilevel model is used for the analysis due to the two levels of variables in the analysis and because of this the error terms are not independent (Luke 2004). Individuals are nested within countries and there are cross-level interactions included in the model.[40] Sampling weights are also used in the model.

Independent variable

The concept for the independent variable is the women in power, in government, that women and men in society see. The way the concept is measured is using the percentage of women in the lower or single house of the national legislature. This variable is taken from the Inter-Parliamentary Union for January 2001. This measures the women in political power that are fairly visible to the public. This study examines the influence of women in political power and their transfer of benefits to women in society. The key transfer that is analyzed is the cueing to citizens that women can function in the same capacity as men in society, and perform important leadership roles in society. The idea of cueing has been previously analyzed (Atkeson 2003; Wolbrecht and Campbell 2007) but these analyses have mainly focused on the political discussion that increases among women due to female candidates or representatives. This analysis focuses instead on the impact that women in power have on attitudes toward women's position in society

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[40] A residual maximum likelihood method of estimation is used for the multilevel model.

among both men and women. The percentage of women in the national legislature provides a good measure of the number of women that citizens in a country see in power. However, one could argue that women in executive positions are more visible, and should be measured for this analysis. The present analysis assumes that women in these legislative positions are a better measure because are several differences with women in the executive and women in legislature. First the pool would be quite small if analyzing female executives, limiting the ability of this study to analyze the influence of women on attitudes. There are few countries that have had female executives in their history, or even in the current time period when these data are collected. Further, a female executive may be seen as an outlier or a result of her familial relationship. In the case of a legislator, these women work alongside men and have visible equality in their power. This could have more of a lasting influence on individual's attitudes toward the role of women, than one woman in the executive position.

The measurement problem with this variable is that in some of these states the women in power may not be democratically-elected and the election method may vary greatly across countries, and may not be accountable to the people. They may be placed in power by the leader or placed in power by a political party for reasons other than their ability to represent the public. Yet this is not a large concern for this study because the goal of the study is to specifically target the role that women in legislature, whether democratically-elected or not, may have on the women in society. As long as men and women in the same legislature have the same amount of power, the actual power of each legislator in relation to their ability to make policy is not as important for this research; what is more important is the role that women have.

In addition to the percentage of women in the national legislature, an interaction term between the percentage of female legislators and the respondent gender is included. This interaction term is included to measure whether the percentage of women in government may have a specific influence on women, as some authors have suggested in previous work (see Atkeson 2003; Wolbrecht and Campbell 2007). If this is the case, then women may be specifically influenced by seeing women in power, because these women in power may serve as roles models to them and legitimize more equality attitudes.

Dependent Variable

The dependent variable measures the paternalistic values that people in the society hold. An index is created from six different variables that measure the paternalistic values that individuals in the society hold. An index is created by using factor scores from the responses to these questions as discussed by Spector (1992). The measure is from low to high, where the higher values for the factor score denote higher levels of equality attitudes toward women and lower factor scores denote lower levels of equality attitudes.[41] Table 4.1 shows each survey question used to construct the index and its possible responses. Each of these questions focuses on women's role as a mother and homemaker. Each of these questions targets the attitudes that an individual holds toward women's role in society, where it ranges from the most public roles to the more traditional private roles by asking questions about whether a woman's involvement in the public workforce hurts the home and family. If a person holds attitudes that view women

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[41] These six variables were chosen during a factor analysis of several questions because they had an Eigen value of 1 or higher. There was only one factor extracted during this analysis. The alpha is 0.74, illustrating that these questions have a high level of internal consistency. The factor score is a continuous variable that is normally distributed.

and men as equal they would not view women's work in the labor force as taking

anything more away from the family life as men's work.

Table 4.1: Survey Questions used to Construct Equality Index	
Question	Possible Response
A working mother can establish just as warm and secure a relationship with her children as a mother who does not work.	1. Strongly Agree 2. Agree 3. Neither Agree nor disagree 4. Disagree 5. Strongly disagree
A pre-school child is likely to suffer if his or her mother works.	1. Strongly agree 2. Agree 3. Neither agree nor disagree 4. Disagree 5. Strongly disagree
All in all, family life suffers when the woman has a full-time job.	1. Strongly agree 2. Agree 3. Neither agree nor disagree 4. Disagree 5. Strongly disagree

Table 4.1: Survey Questions used to Construct Equality Index
(cont'd)

A job is all right, but what most women really want is a home and children.	1. Strongly agree
	2. Agree
	3. Neither agree nor disagree
	4. Disagree
	5. Strongly disagree
Being a housewife is just as fulfilling as working for pay.	1. Strongly agree
	2. Agree
	3. Neither agree nor disagree
	4. Disagree
	5. Strongly disagree
A man's job is to earn money; a woman's job is to look after the home and family.	1. Strongly agree
	2. Agree
	3. Neither agree nor disagree
	4. Disagree
	5. Strongly disagree

The data for the dependent variable are survey data and there could be some problems with this data due to the surveys being conducted by many different people in different contexts which might not provide exactly the same meaning of the questions in each setting. Yet due to the large number of surveys conducted, on the whole the data

should be reliable and provide an accurate measurement of the concepts. The

International Social Survey Programme uses great care in conducting surveys that are

comparable and exhibit question coherence across contexts.[42] A large number of articles

have been published using this dataset ranging from, the study of welfare attitudes

(Svallfors 1997) the gender gap in pay (Blau and Kahn 1992) to attitudes about the

environment (Franzen 2003). This dataset has been utilized by many researchers to

conduct cross-national research.

Control Variables

Age of the respondent

The age of the respondent is measured by the age in years. The minimum age

surveyed is 15 years old, and the maximum is 96. As age increases, one is assumed to be

influenced less by women in legislature. This could be due to the fact that many of the

beliefs about the world one lives in are formed when individuals are younger. For

example, Wolbrecht and Campbell (2007) found that adolescents are more influenced by

women leaders than older women are. A negative relationship is expected between this

variable and equality attitudes.

Education level of the respondent

There is also assumed to be a connection between education and equality

attitudes. As a person is more educated they may have come into contact with differing

viewpoints, and they will likely hold less paternalistic values. The education level is

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[42] The following ISSP website provides detailed information on how the data is collected and how every attempt is made to make the surveys consistent across contexts.
<http://www.issp.org/page.php?pageId=170>

measured by years of education an individual has,[43] and it is expected to be positively

related to the equality values of an individual.

Marital Status

The marital status is an important control when analyzing the attitudes of people

on the role of women in society. It is assumed that this variable is negatively related to

the equality values of an individual. An individual is coded as 1 if they are married and as

0 if they are not married. There is only expected to be a theoretical significance between

the attitudes of an individual and their actual legal married status, as opposed to whether

they live with a partner or have been previously married. The institution of marriage

indicates in many societies a particular set of assumptions concerning gender roles and

therefore acceptance of this legal and social institution may be connected with some

specific views on gender relations in the home. Additionally, society will place more

pressure on individuals that are married to accept gender roles. If an individual is not

married they will likely not feel the pressure to accept these roles by their friends and

family, and they will also not feel the pressure of having to figure out how to balance

child care and work, or the other pressures that are a part of many marriages.

Female

An individual's gender is important in analyzing the differential attitudes between

men and women on women's equality. It is expected that gender, coded as one if the

person is female, is positively related to women's equality in society. Women hold a

higher stake in equality since this influences them and their lives directly. Thus it is

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[43] The years of education ranged from 0 to 82 originally. The values that were above 25 were recoded to equal 25. While this does lose some of the data, it is highly unlikely that the values of 82 were valid and actually represented the individual receiving 82 years of education. Values that were coded as still attending were recoded as missing since it was difficult to determine at what level of education that the individual was currently.

assumed women will be more likely to have higher equality attitudes than men. This measure is also a constituent term in one of the independent variables, the interaction between female and the percent of women in the legislature. The coefficient for gender, holding other variables constant, is the influence of female on equality attitudes when the percent of women is zero.

Rural

This variable is a dummy variable that measures whether the person lives in a rural area or not. It is expected that rural areas hold more traditional views toward women than urban areas. This variable is expected to have a negative relationship with equality attitudes toward women.

Religion

There are several different religious affiliation dummy variables that are included. These are for the specific religions of Islam, Orthodox, Protestant, and Roman Catholic. The religions were chosen due to their historically traditionalistic views toward women's role in society. Each of the variables is expected to have a negative impact on equality attitudes toward women.

Ideology

An individual's ideology is considered to shape ideas concerning equality of women. Two dummy variables are included that measure whether the individual identifies with far left or far right ideology. This influence is only seen to be important for those that identify themselves on the extremes as either far right or far left. It is expected that those individuals that identify themselves as far right have more traditional values related to women's proper role in society and therefore this variable is expected to

be negatively related to equality attitudes. Due to the differing political parties across the countries included in this study this is the best way to measure the influence that political ideology might have on gender role attitudes. Those that identify on the far left are expected to be positively related to equality attitudes toward women.

Equality Culture

To control for the level of equality in the country, which could be related to the percentage of women in the legislature, a cultural equality score is included in the model. This score is the median values of a question in the World Values Survey that asks whether a man is better at being a political leader than a woman. This controls for some of the causality problems of the study because if the percentage of women in the legislature is significant even with this control than there is a connection between the percentage of women in the legislature and the equality attitudes among individuals as theorized. This variable is also included because of possible endogeneity problems; do society's attitudes drive the election of women. This variable controls for some of these endogeneity issues but controlling for the cultural attitudes toward women in politics.

Table 4.2: Descriptive Statistics of Variables used in Analyses				
Variable	Observations	Mean	Min	Max
Equality Scale[44]	20246	-0.097	-1.953	1.995
Working Mom Warm Relationship	22227	2.427	1(Strongly Agree)	5(Strongly Disagree)

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[44] The Equality Scale is made up by the following variables which are included in the descriptive table; Working Mom Warm Relationship, Working Mom Preschool Child Suffers, Working Mom Family Life Suffers, Women Really Want Home and Kids, Household Satisfies as Much as Job, and Men's Job is Work Women's Job is Household.

Table 4.2: Descriptive Statistics of Variables used in Analyses (cont'd)

Working Mom Preschool Child Suffers	22077	2.678	1(Strongly Agree)	5(Strongly Disagree)
Working Mom Family Life Suffers	22143	2.790	1(Strongly Agree)	5(Strongly Disagree)
Women Really Want Home and Kids	21691	2.710	1(Strongly Agree)	5(Strongly Disagree)
Household Satisfies as Much as Job	21494	2.745	1(Strongly Agree)	5(Strongly Disagree)
Men's Job is Work, Women's Job is Household	22375	3.210	1(Strongly Agree)	5(Strongly Disagree)
Percent Women 2001	22707	19.514	5.7	42.7
Female	22707	0.549	0	1
Married	22518	0.586	0	1
Education	22707	12.433	1	25
Age	22632	44.711	15	96
Rural	22485	0.254	0	1
Far Right	18747	0.021	0	1
Far Left	18747	0.066	0	1
Islam	22147	0.007	0	1
Orthodox	22147	0.051	0	1
Protestant	22147	0.272	0	1
Roman Catholic	22147	0.431	0	1
Country Equality Score	22707	2.685	2.120	3.406

The descriptive statistics for the data are included in Table 4.2. The equality scale that serves as the measure of an individual's attitudes toward traditional gender roles ranges from -1.953 to 1.995, where a higher score indicates more equality attitudes. The percent of women in the study ranges from 5.7% to 42.7%. More than half of the individuals are female and married. While the age ranges from 15 to 96 the average age of the respondent is 44. The average education level is 12 years, but ranges from 1 year to 25 years. Close to 70% of the individuals are either Catholic or Protestant, with a very small percentage of Muslims or Orthodox. About 25% of the individuals live in rural areas. A small percentage of individuals consider themselves far right or far left politically, only 2% and 7% respectively.

4.5 Results

Results

    The results of the multilevel linear regression model are presented in Table 4.3.

The independent variable in this model, the percentage of female representation, is not a

significant predictor of the level of equality values that a citizen in a society holds. Yet

the percentage of women in the legislature seems to be influencing women's equality

attitudes quite directly. The additional focal independent variable in the model, the

interaction between the percentage of women and the respondent's gender is significant.

This shows that there is likely a specific influence that an increased representation of

women has on women in society. This is consistent with previous research that showed

women in power might serve as role models for women in society. It appears from the

results that the increased representation of women in government influences the attitudes

of women directly. Unexpectedly, gender is significantly yet negatively related to

equality attitudes. The negative coefficient for this variable indicates that women, when

the percentage of women in the national legislature is zero, have lower equality attitudes

than men; which is really only a theoretical result since the minimum number of women

is about five percent, as indicated by Table 4.2.

    Many of the control variables are significant in their predicted direction. Age has

a significant and negative effect on the equality values that a person holds. As age

increases, equality attitudes decreased. Education has a positive effect on the attitudes

toward equality that a person has. Being married is not significantly related to an

individual's equality attitudes. Living in a rural area is significant and negatively related

to equality attitudes toward women. Considering one's ideology as far left is significantly and positively related to equality attitudes toward women, but identifying one's ideology as far right is not significantly related to equality attitudes toward women. All of the religion dummy variables were significant. Islam, Orthodox, Protestant and Roman Catholic all were negatively and significantly related to equality attitudes toward women. The control for equality culture of a country is not significant in the analysis.

Table 4.3: Multilevel Linear Regression Model of Factor Scores for Equality Attitudes		
Variable	Coefficient	Standard Error
Key Independent Variables		
Percent Women 2001	0.014	0.010
Gender	-0.122***	0.022
Percent Women 2001*Gender	0.010***	0.001
Individual-Level Control Variables		
Married	-0.001	0.012
Education	0.010***	0.001
Age	-0.003***	0.0004
Rural	-0.061***	0.011
Far Right	0.018	0.023
Far Left	0.124***	0.031
Islam	-0.224***	0.040
Orthodox	-0.169*	0.071

Table 4.3: Multilevel Linear Regression Model of Factor Scores for Equality Attitudes (cont'd)

Protestant	-0.081***	0.024
Roman Catholic	-0.064***	0.018
Country Level Control Variable		
Equality Culture	0.233	0.297
Constant	-0.929	0.630
N	16,295	
Note: p<0.05=*, p<0.01=**, p<0.001=***		

4.6 Conclusions

Conclusion

This study provides an understanding of the impact that women in legislatures have on the citizens of a country and their attitudes toward women. There appears to be evidence that women in power influence the attitudes of the citizens of a country, but only female citizens. As female citizens see women in power holding the same positions as men, it demonstrates that women are capable of participating in public life in the same way as men. The role that women play in encouraging equality attitudes likely is much broader than this study analyzes, yet this study does show that there could be an important connection between those women that citizens see in power and how citizens begin to view the women they see in their normal day-to-day life. While increasing female representation has important democratic and representative effects, the influence that this increase in descriptive representation might have on changing social stereotypes and attitudes about roles is an important question. This could encourage countries to use policies that will increase the number of women in the national government. Quotas could have a much broader influence on society than the substantive representative that they may offer. This increase in the number of women in the national legislature could begin to change individual's ideas about the roles of women in society. Women should play an important part in the political structure of a state, their involvement could undermine much of the informal discrimination that occurs at all levels in a country due to attitudes and values that model the behavior of social interaction between men and women in a country.

Future Research

　　Further research is needed that encompasses a larger set of countries in the world with a more diverse set of ethnicities, religions, political structure, and development. This would give further insights into the influence women in elected office have on the citizens of all countries. Additional measures of women in power could be used to see the influence not only of women in the legislature, but women in the executive and local political offices. In addition to this powerful and visible businesswomen could play a role in breaking down these paternalistic attitudes. Including a measure of the percentage of female CEO's or other measures of women's influence in business could further knowledge about the connections between women in power and equality attitudes.

Chapter 5: Conclusions

"This world crisis came about without women having anything to do with it. If the women of the world had not been excluded from world affairs, things today might have been different."

Alice Paul (1941)

The three articles included in this dissertation discuss several important questions regarding the role that gender plays in the political and public life of men and women. As Alice Paul mused in her own time, it is difficult to imagine what a world would be like if women were included more equally in political and social life. Gender is an important part of the structure of society; in many ways, it forms how individuals are expected to behave, it can influence the success that an individual has in life, and it can socialize individuals to have very different views and beliefs. Gender is an important factor that models behavior and attitudes, and thus it affects public policy. Each of these individual articles also shows the importance of including gender as a part of the theory explaining public policies.

Attitudes and Public Policy

The first article in this dissertation delved into the idea of attitudes and how attitudes differ between men and women. This idea is not new or ground-breaking, yet this analysis adds three important dimensions to the study of gender and public policy. First, these findings support the theory of gender differences in socialization. No matter how much legal equality there might be in a society, attitudes and socialization still are so ingrained in our society that sometimes we fail to even acknowledge them in our behavior and beliefs. Second, even in contemporary issues about which both men and women debate, the gender gap is still in the same direction as expected. Women are less likely to support escalating violence, which touches a variety of policy issues with which our country grapples. Lastly the article presents evidence that when individuals chose an ambivalent survey response, it may be a reflection of conflict in core values (Alvarez and

Brehm 1995). The three different contributions of this research have several public policy implications.

Differences in attitudes between men and women can first be seen as having an influence on the government or the type of government that a country has in place, the policy goals and the policy dynamics of a country. The differences between men's and women's attitudes toward public policy, such as torture, may not be adequately reflected by a political system that is not equally representative of men and women. These differences in attitudes could be partially reflected by differences in party membership, yet the nuanced views that men and women may not be reflected in policy without true equal representation. Clearly, education alone cannot be sufficient to make equal representation a reality. While many countries around the world have recognized this and institutionalized quotas, this is not in the foreseeable future for the United States. Yet policies and programs that support women's and girls' involvement in politics at a young age could be instrumental in reducing the informal discrimination against women in politics and the early socialization that leads women away from political careers. In addition to this the public school system in the US could focus more on encouraging girls to become more active in politics. The earlier the segregation of the sexes in politics occur the more stable these differences are likely to become.

The second contribution of this study to the literature is the persistence of these differences between men and women, even in regard to contemporary political issues. Men and women still seem to be less aggressive as research on violence policy from 30 years ago also showed. This provides some interesting evidence of the persistence of the differences in the way that men and women are socialized, and the different expectations

of men and women. The importance of femininity and masculinity have not changed, rather it may be channeled into somewhat different directions. The persistence and commonalities in these issues simply provide evidence that little has changed in the roles and expectations of the sexes in society.

The last contribution of this research is the evidence that conflict in values can cause ambivalent responses. This finding shows that it might be quite difficult for individuals to have definitive positions on certain policies when there are cross-pressures, such as closeness to a particular political figure and socialized attitudes toward non-violence. The implications of this finding in regard to public policy can be seen both at the scholarly and the policymaking levels. In regard to scholarly research it is important to consider the difficulty that an individual might have in responding to these survey questions on certain policies if the individual has conflicting values where it concerns a certain policy. Policymakers as well need to evaluate the public's perception of a policy and their understanding of how a policy might fit into the framework of their political ideology. Surveys cannot be seen as a complete picture of individual perceptions and policy preferences, or scholars need to uncover better ways in which to tap such value conflicts.

Diversity, Institutions, and Public Policy

The second study in this dissertation examined whether gender composition affects organizational culture by examining individual perceptions of the organizational culture in a university. For some fields, male-dominated organizational culture is so ingrained; it appears more women do not change the culture. In some ways this is contrary to what was theoretically expected, and is normatively disappointing as well.

However, this study shows one of the important barriers that women face in academia and in many other institutions: the climate of the organization. This climate can influence whether a woman feels that she is valued as much as her male colleagues, and can ultimately influence whether she is as productive as she can be at the institution. The climate of an institution can also influence a woman's decision to opt-out of a career in these male dominated fields. The primary contribution of this study is to show that women in historically male-dominated departments (STEM departments) do experience a more negative climate in the workplace than men do, even when there is a high representation of women in that department. This finding provides evidence that the organizational culture might be so persistently masculine than even incorporating more women into the organization does little to change this culture. These findings have several important public policy implications regarding the success of women in the workplace.

Public policy plays an important role in regard to the diversity of many organizations, especially government institutions. Many government institutions place diversity as a high priority in their organization, yet the influence of diversity on the different aspects of the workplace has not been fully explored. Much of the discussion and conflict in the public arena whenever the idea of diversity is discussed centers around the two competing ideas, that of equality of opportunity and of equality of outcome. While these may be considered the extremes of the spectrum they are largely discussed as the two alternatives. Equality of opportunity basically identifies the problem as the starting point, so if women are allowed the same education and the same opportunities as men they should be able to succeed (or at least if women do not succeed then women can

be blamed for their own failure and not the system). Focusing on equality of outcome points to the differences in the outcomes as evidence that somewhere along the way, whether it be in education, hiring practices, raises, family obligations, or even climate women are not given the same opportunities as men. This study presents evidence that the climate of an organization is a place where these "opportunities" might be very different for men and women, and the process leading to an outcome may be unequal or uncomfortable for women.

Research has shown that from the time that women are hired, to the time they leave a job, there are multiple points along the way that the opportunities for women simply are not the same (see Hall and Sandler 1982, Tolich and Briar 1999, Stone and Lovejoy 2004, Welle and Heilman 2005). The finding of this study leads one to question whether the job atmosphere in some institutions or in some fields may be so masculine that women in these institutions simply adopt and perpetuate the norms. Thus, simply adding more women cannot change these norms. In an institution such as a university department, where so much preparation goes into reaching these positions, there may be few options for women to go against the system. Women who cannot handle the masculine environment may self-select themselves out and leave the institution, and those that are left may be forced to comply in order to succeed in their chosen profession. More attention may need to be given to analyze ways to change the climate for women in historically masculine fields.

The negative climate for women in the workplace not only works against increasing diversity in the workplace, in the case of this study, a university department, but also works against increasing equality in society and increasing opportunities for

women. A negative climate in an institution can make it difficult for diversity goals to be reached. Additionally, if women do not feel welcome in a department they may end up leaving the institution, which can lead to several negative outcomes for the institution and society in general.

The first problem is for the institution, if the only women that stay in a department are the ones that co-opt the masculine roles, organizational change will be non-existent or very slow. Long-term problems in obtaining diversity could result. Clearly this also can influence the talent that the department can attract, if the university is excluding women who will not become part of this masculine environment. It is also possible the university is then losing a significant number of female academics, and potentially male ones too. In addition to these micro-level effects, there are also larger societal problems. If highly-educated women leave the labor market, the market loses their potential creations and innovations in the field of their choice—those in math and science may be particularly important. The cost of educating a whole group of women that do not contribute to society because they are excluded is wasting a large pool of resources, of which both public and private institutions could take advantage. Clearly higher education is a cost that society bears in some part and by these individuals dropping out of the labor market their full potential is not being captured.

Diversity in Government and Public Policy

Given the findings of the second study, scholars should inquire whether more women in an organization can change attitudes about the roles that women should hold, particularly high profile political organizations. That is the subject of the final article in this dissertation. The final article analyzed the role that women in government can have

on increasing equality attitudes in society worldwide. While the influence of the percentage of women in legislature on all individuals is not significantly related to reported attitudes about equality for all individuals, the role that women in legislature has on women is very influential. This study has an important contribution not only to the role that women in legislature play as role models, but also their influence on broader equality attitudes in society. Women in government could change how women view themselves and the proper roles of women in society. This finding has several influences on public policy and specifically policies that help women succeed in politics.

Some of the rationales for programs that increase the representation of women point to the laws and policies that women will pass that will help women in society, the substantive representation that occurs with increased female politicians. This clearly does play a large role in the democracy in the United States and the importance of each group being represented by members of their own group. Yet the study finds that the benefits of increasing diversity in the legislature may be broader than simply substantive representation. Women in government might play an instrumental role in increasing women's acceptance in all sectors of society and changing stereotypes about women.

There are several public policy implications from this research. The first is that programs that help women succeed in politics can have a long-term impact on the equality in society, beyond simply giving women the same legal and actual opportunities as men. Women in government might have a transformative role in changing stereotypes and perceptions. Even if this change only occurs among women, it could encourage more women to be involved in government. In many—if not most—countries in the world, legal equality for women has for the most part been obtained. However, there continues

to be inequality in society. This study points to some of the ways that inequality that is caused by differences in socialization and beliefs about ability, could be minimized if not eliminated. If these attitudes are changed, even among women, it will influence how women view themselves and what they are capable of and what they can likely achieve. Public policies that increase women's ability to run for elective office and to be competitive candidates could play a crucial role in eliminating the informal discrimination that is still very prevalent in many parts of the world. In addition, this research shows support for policies such as gender quotas. Quotas can serve a broader purpose than simply increasing descriptive representation; they could encourage change in attitudes among women that model future roles of women.

Gender and Politics Contributions

The main contribution of these three studies is that gender is still a very important and significant factor in the study of public policy and politics. Gender plays a role in the attitudes that individuals hold toward specific public policies and attitudes that individuals have about other individuals. Both of these factors influence the way that individuals vote, govern, and work in their daily lives. The somewhat elusive equality of the sexes in political life and in the labor force can be seen as a consequence of the persistence of these attitudes, attitudes that see women as best equipped to run a home and perform domestic duties, whether the women are inside or outside the labor force. The incorporation of women more equally into government could also have a significant influence on the policy choices of the country; the changes in policy may be only marginal but a change nonetheless. The basis though of a democracy is to incorporate all members of a society so that their views are adequately and equally represented. The

equality of women in government is an essential step in making a society truly

representative of the individuals in that society and ensuring that equality of opportunity

does actually lead to equality of outcome.

REFERENCES

Aboim, Sofia. 2010. "Family and Gender Values in Contemporary Europe: The Attitudinal Gender Gap from a Cross-National Perspective." *Portuguese Journal of Social Science* 9 (1): 33-58.

Advance Institutional Transformation Working Group. 2005. *Advance Indicators Toolkit*. <http://www.advance.vt.edu/Measuring_Progress/Toolkits/Advance_Data_Indicators_Toolkit_Jan05.pdf> Accessed 3 May 2011.

Advance Institutional Transformation Working Group. 2006. *Using Program Evaluation to Ensure the Success of Your Advance Program.* <http://www.advance.vt.edu/Measuring_Progress/Toolkits/Advance_Program_Evaluation_Toolkit_08May06.pdf> Accessed 3 May 2011.

Alvarez, R. Michael & John Brehm. 1995. "American Ambivalence Towards Abortion Policy: Development of a Heteroskedastic Probit Model of Competing Values." *American Journal of Political Science* 39(4): 1055-1082.

American National Election Studies (ANES). American National Election Study, 2008: Pre- and Post-Election Survey [Computer file]. ICPSR25383-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2009-06-10. doi:10.3886/ICPSR25383

Atkeson, L. R. 2003. Not all Cues are Created Equal: The Conditional Impact of Female Candidates on Political Engagement. *The Journal of Politics* 65 (4): 1040-1061.

Atkeson, Lonna. R. and Nancy Carrillo.2007. "More is Better: The Influence of Collective Female Descriptive Representation on External Efficacy." *Politics and Gender* 3(1):79-101.

Backhouse, Constance. 2003. "The Chilly Climate for Women Judges: Reflections on the Backlash from the Ewanchuk Case." *Canadian Journal of Women & the Law* 15(1): 167-193.

Bass, Bernard M. and Bruce J. Avolio. 1994. "Shatter the Glass Ceiling: Women May Make Better Managers." *Human Resource Management* 33(4): 549-560.

Bass, Bernard M., Bruce J. Avolio, and Leanne Atwater 1996. "The Transformational and Transactional Leadership of Men and Women." *Applied Psychology* 45(1): 5-34.

Baumgartner, Jody C., Peter L. Francis, & Jonathan S. Morris. 2008. "A Clash of Civilizations? The Influence of Religion on Public Opinion of U.S. Foreign Policy in the Middle East." *Political Research Quarterly* 61(2): 171-179.

Bendl, Regine & Angelika Schmidt. 2010. "From 'Glass Ceiling' to 'Firewalls' – Different Metaphors for Describing Discrimination. *Gender, Work and Organization* 17(5): 612-634.

Bjarnason, Thoroddur & Michael R. Welch. 2004. "Father Knows Best: Parishes, Priests, and American Catholic Parishioners' Attitudes toward Capital Punishment" *Journal for the Scientific Study of Religion* 43 (1): 103-118.

Box-Steffensmeier, Janet M., Suzanna de Boef, & Tse-Min Lin. 2004."The Dynamics of the Partisan Gender Gap." *American Political Science Review* 98(3): 515-528.

Brady, H., Verba, S., & Schlozman, K. 1995. "Beyond SES: A Resource Model of Participation." *American Political Science Review* 89(2): 271-294.

Campbell, David E. & Christina Wolbrecht. 2006. "See Jane Run: Women Politicians as Role Models for Adolescents." *Journal of Politics* 68(2): 233-247.

Caprioli, Mary & Mark A. Boyer. 2001. "Gender, Violence, and International Crisis." *The Journal of Conflict Resolution* 45(4): 503-518.

Committee on Maximizing the Potential of Women in Academic Science and Engineering and Committee on Science, Engineering, and Public Policy. 2007. Beyond Bias and Barries: Fulfilling the Potential of Women in Academic Science and Engineering. The National Academies Press: Washington, D.C.

Conover, Pamela Johnston. 1988. "Feminists and the Gender Gap." *Journal of Politics* 50 (4): 985-1010

Conover, Pamela Johnston & Virginia Sapiro. 1993. "Feminist Consciousness, and War." *American Journal of Political Science* 37 (4): 1079-1099.

Cook, Elizabeth Adell & Clyde Wilcox. 1991. "Feminism and the Gender Gap – A Second Look." *Journal of Politics* 53(4): 1111-1122.

Dahlerup, Drude. 2006. *About Quotas*. Retrieved April 7, 2008, from Global Database of Quotas for Women: http://www.quotaproject.org/aboutQuotas.cfm

Dahlerup, Drude. and Freidenvall, Lenita. 2005. "Quotas as a 'Fast Track' to Equal Representation for Women." *International Feminist Journal of Politics* 7(1): 26-28.

Dansby, Mickey R. & Dan Landis. 1998. "Race, Gender, and Representation Index as Predictors of an Equal Opportunity Climate in Military Organizations." *Military Psychology* 10 (2): 87-105.

De Volo, Lorraine Bayard. 2004. "Mobilizing Mothers for War: Cross-National Framing Strategies in Nicaragua's Contra War." *Gender and Society* 18(6): 715-734.

Dolan, Kathleen. 2006. "Symbolic Mobilization? The Impact of Candidate Sex in American Elections." *American Politics Research* 34(6): 687-704.

Dolan, Kathleen. 1997. "Voting for Women in the Year of the Woman." *American Journal of Political Science* 42(1): 272-293.

Donnell, Susan M. and Jay Hall .1980. "Men and Women as Managers: A Significant Case of No Significant Difference." *Organizational Dynamics* 8(4): 60-77

DuBois, Ellen Carol. 1987. "Outgrowing the Compact of the Fathers: Equal Rights, Woman Suffrage, and the United States Constitution, 1820-1878." *Journal of American History* 74(3): 836-862.

Eichenberg, Richard C. 2003. "Gender Differences in Public Attitudes toward the Use of Force by the United States, 1990-2003." *International Security* 28(1): 110-141.

Eichenberg, Richard C. 2010. "When Gender (Sometimes) Trumps Party Citizen Attitudes toward Torture in the War against Terror and the Use of Poison Gas in World War II." *Midwest Political Science Association Conference,* Chicago, IL April 20-24, 2010.

Etzkowitz, Henry, Carol Kemelgor, Michael Neuschatz, Brian Uzzi, and Joseph Alonzo. 1994. The Paradox of Critical Mass for Women in Science." *Science* 266(5182): 51-54.

Evertsson, Marie. 2006. "The Reproduction of Gender: Housework and Attitudes Towards Gender Equality in the Home Among Swedish Boys and Girls." *The British Journal of Sociology* 57(3): 415-436.

Faber, Jan. 1990. "On Bounded Rationality and the Framing of Decisions in International Relations: Towards a Dynamic Network Model of World Politics." *Journal of Peace Research* 27(3): 307-319.

Faludi, Susan. 1991. *Backlash: The Undeclared War Against American Women*. New York: Crown Publishers

Feldman, Stanley & John Zaller. 1992. "The Political Culture of Ambivalence: Ideological Responses to the Welfare State." *American Journal of Political Science* 36(1): 268-307.

Fite. David, Marc Genest, & Clyde Wilcox. 1990. "Gender Differences in Foreign Policy Attitudes: A Longitudinal Analysis." *American Politics Quarterly* 18(4): 492-513.

Fortune. Women CEO's 2008 <"http://money.cnn.com/magazines/fortune/fortune500/2008/womenceos/"> Accessed 22 March 2011.

Fortune. Women CEO's 2010< Fortune. Women CEO's 2008
<"http://money.cnn.com/magazines/fortune/fortune500/2008/womenceos/">
Accessed 22 March 2011.

Fox, Greer Litton & Robert F. Kelly. 1995. "Determinants of Child Custody
Arrangements at Divorce." *Journal of Marriage and Family* 57(3): 693-708.

Francis, Joe D. & Lawrence Busch. 1975. "What We Now Know about 'I Don't
Knows.' " *Public Opinion Quarterly* 39(2): 207-218.

Franzel, Axel. 2003. "Environmental Attitudes in International Comparison: An Analysis
of the ISSP Surveys 1993 and 2000." *Social Science Quarterly* 84(2): 297-308.

Franzway. Suzanne, Rhonda Sharp, Julie E. Mills, and Judith Gill. "Engineering
Ignorance: The Problem of Gender Equity in Engineering." *Frontiers: A Journal
of Women Studies* 30(1): 89-106.

Fridkin, Kim, & Patrick Kenney. 2007 "Examining the Gender Gap in Children's
Attitudes toward Politics." *Sex Roles* 56(3/4): 133-40.

Gilligan, Carol. 1982. *In a Different Voice: Psychological Theory and Women's
Development*. Cambridge, MA: Harvard University Press.

Goblebiowska, Ewa A. 1999. "Gender Gap in Political Tolerance." *Political Behavior*
21(1): 43-66.

Green, John C. 2007. "Religion and Torture: A View from the Polls." *The Review of
Faith and International Affairs* 5(2):23-27

Hall, Roberta M., Bernice R. Sandler, & Association of American Colleges Washington
DC. Project on the Status and Education of Women. 1982 "The Classroom
Climate: A Chilly One for Women?" 24: Project on the Status and Education of
Women.

Haider-Markel, Donald P. & Adrea Vieux. 2008. "Gender and Conditional Support for
Torture in the War on Terror." *Politics & Gender* 2(1):5-33.

Harris, Richard J., and Juanita M. Firestone. 1998. "Changes in Predictors of Gender
Role Ideologies Among Women: A Multivariate Analysis." *Sex Roles* 38(3/4):
239-252.

Heilman, Madeline E., Caryn J. Block, Richard F. Martell, and Michael C. Simon. 1989.
"Has anything changed? Current Characterizations of Men, Women, and
Managers."*Journal of Applied Psychology* 74(6):935-942.

Henehan, Marie T., and Meredith Reid Sarkees. 2009. "Open Doors and Closed Ceilings:
Gender-Based Patterns and Attitudes in the International Studies Association."
International Studies Perspectives 10 (4): 428-446,

Hess, Robert D. & Judith V. Torney. 1967. *The Development of Political Attitudes in Children*. Chicago: Aldine.

Higher Education Research Institute. *University of North Carolina CIRP 2007-2008 Faculty Survey*. Higher Education Research Institute, Graduate School of Education and Information Studies, University of California, Los Angeles.

Higher Education Research Institute. Administration Guidelines <http://www.heri.ucla.edu/PDFs/surveyAdmin/fac/fac10AdminGuidelines.pdf>, accessed 28 April 2011.

Hill, D. 1981. Political Culture and Female Political Representation. *The Journal of Politics 43*: 159-168.

Holsti, Ole R. & James N. Rosenau. 1988. "The Domestic and Foreign Policy Beliefs of American Leaders." *Journal of Conflict Resolution* 32(2): 248-294.

Hooks, Gregory & Clayton Mosher. 2005. "Outrages Against Personal Dignity: Rationalizing Abuse and Torture in the War on Terror." *Social Forces* 83(4): 1627-1645.

Howell, Susan E. & Christine L. Day. 2000. "Complexities of the Gender Gap." *Journal of Politics* 62 (3): 858–74.

Hutchins, Vincent L. 2001. "Political Context, Issue Salience, and Selective Attentiveness: Constituent Knowledge of the Clarence Thomas Confirmation Vote." *Journal of Politics* 63(3): 846-868.

Jackson, Judy. 2004. "The Story is Not in the Numbers: Academic Socialization and Diversifying the Faculty." Feminist Formations 16(1): 172-185.

Jackson, Richard. 2007. "Language, Policy and the Construction of a Torture Culture in the War on Terrorism." *Review of International Studies* 33(3): 353-371.

IDEA. 2006. *Global Database of Quotas for Women*. Accessed 7 April 2008 <http://www.quotaproject.org/>

Ingram, H., & Anne L. Schneider, D. P. 2007. Social Construction and Policy Design. In P. Sabatier (Ed.), *Theories of the Policy Process* (2nd ed.). Boulder, Colorado: Westview Press.

Inter-Parliamentary Union. 2011 *Women in National Parliaments Statistical Archives.* Inter-Parliamentary Union: http://www.ipu.org/wmn-e/classif-arc.htm (April 18, 2008)

International Social Survey Program (ISSP). International Social Survey Program:Family And Changing Gender Roles III, 2002 [Computer file]. ICPSR version. Cologne, Germany: Zentralarchiv fur Empirische Sozialforschung [producer], 2004.

Cologne, Germany: Zentralarchiv fur Empirische Sozialforschung/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2004.

Kanter, Rosabeth Moss. *Men and Women of the Corporation*. New York: Basic Books, 1977.

Karp, Jeffrey A., & Susan A. Banducci. "When Politics is Not Just a Man's Game: Women's Representation and Political Engagement." *Electoral Studies* 27(1): 105-115.

Katz, David. 1987. "Sex Discrimination in Hiring: The Influence of Organizational Climate and Need for Approval on Decision Making Behavior." *Psychology of Women Quarterly* 11 (1): 11-20.

Kaufmann, Karen M. 2006. "The Gender Gap." PS: Political Science and Politics 39(3): 447-453.

Kelly, Rita Mae and Mary Boutilier. 1978. The *Making of Political Women: A Study of Socialization and Role Conflict*. Chicago: Nelson-Hall.

Keyssar, Alexander. 2001. *The Right to Vote: The Contested History of Democracy in the United States*. New York:Basic Books.

King, David C. & Richard E. Matland. 2003 "Sex and the Grand Old Party: An Experimental Investigation of the Effect of Candidate Sex on Support for a Republican Candidate."*American Politics Research* 31 (6): 595-612.

Kohlstedt, Sally Gregory. 2004. "Sustaining Gains: Reflections on Women in Science and Technology in 20th-Century United States." *Feminist Formations* 16(1): 1-26.

Lauritsen, Janet L. Heimer, Karen, & James P. Lynch. 2009. "Trends in the Gender Gap in Violent Offending: New Evidence from the National Crime Victimization Survey." *Criminology* 47(2): 361-399.

Lawless, Jennifer L. 2004. "Women, War, and Winning Elections: Gender Stereotyping in the Post-September 11th Era." *Political Research Quarterly* 57(3): 479-90.

Little, Thomas. H., Dana Dunn, and Rebecca E. Deen. 2001. "A View from the Top: Gender Differences in Legislative Priorities Among State Legislative Leaders." *Women and Politics* 22 (4): 29-50.

Long, J. Scott & Jeremy Freese. 2006. *Regression Models for Categorical Dependent Variables Using Stata* (2nd ed.), College Station, Texas: Stata Press.

Lott, Bernice. 1981. *Becoming a Woman: The Socialization of Gender*. Springfield, IL:

Lowndes, Vivien. 2004. "Getting On or Getting By? Women, Social Capital and Political Participation." *British Journal of Politics and International Relations* 6(1): 47-66.

Layman, Geoffrey C. 1997. "Religion and Political Behavior in the United States." *Public Opinion Quarterly* 61(2): 288-316

Luke, Douglas A. 2004. *Multilevel Modeling*. Sage Publications: Thousand Oaks, CA.

Marini, Margaret Mooney. 1990. "Sex and Gender: What Do We Know?" *Sociological Forum* 5(1): 95-120

May, P. J. 1991. "Reconsidering Policy Design: Policies and Publics." *Journal of Public Policy* 11 (2): 187-206.

McKay, Joanna. 2004. "Women in German Politics: Still Jobs for the Boys?" *German Politics* 13 (1): 56-80.

McAllister, Ian, and Donley T. Studlar. 2002. "Electoral Systems and Women's Representation: A Long-Term Perspective." *Representation* 39(1):3-14.

Mondak, Jeffrey J. 2001. "Developing Valid Knowledge Scale." *American Journal of Political Science* 45(1): 224-238.

Mondak, Jeffrey J. 1999. "Reconsidering the Measurement of Political Knowledge." *Political Analysis* 8(1): 57-82.

Mondak, Jeffrey J. & Mary R. Anderson.2004. "The Knowledge Gap: A Reexamination of Gender-Based Differences in Political Knowledge." *The Journal of Politics* 66(2): 492-512.

Monk-Turner, Elizabeth, & Rebecca Fogerty. 2010. "Chilly Environments, Stratification, and Productivity Differences." *The American Sociologist*. 41 (1):3-18.

Monroe, Kristen, Saba Ozyurt, Ted Wrigley, & Amy Alexander. 2008. "Gender Equality in Academia: Bad News from the Trenches, and Some Possible Solutions." *Perspectives on Politics* 6(2): 215-233.

Morris, LaDonna, and Larry Daniel. 2008. "Perceptions of a Chilly Climate: Differences in Traditional and Non-Traditional Majors for Women." *Research in Higher Education* 49(3): 256-73.

National Academy of Sciences, National Academy of Engineering, and Institute of Medicine of the National Academies. 2007. *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*. The National Academies Press. Washington, D.C.

Norrander, Barbara. 1999. "The Evolution of the Gender Gap." *Public Opinion Quarterly* 63 (4): 566-576.

Norrander, Barbara and Clyde Wilcox. 2008. "The Gender Gap in Ideology." *Political Behavior* 30(4): 503-523.

Orum, Anthony M., Cohen, Roberta S., Grasmuck, Sherri, & Amy W. Orum. 1974. "Sex, Socialization, and Politics."*American Sociological Review* 39(2): 197-209.

Phillips, A. 2004. "Defending Equality of Outcome." *The Journal of Political Philosophy* 12 (1): 1-19.

Phillips, A. 1991. *Engendering Democracy*. University Park: The Pennsylvania State University Press.

Portz, J. 1996. "Problem Definition and Policy Agendas: Shaping the Educational Agenda in Boston." *Policy Studies Journal* 24(3): 371-386.

Rapoport, Ronald B. 1982. "Sex Differences in Attitude Expression: A Generational Explanation." *Public Opinion Quarterly* 46(1): 86-96.

Ruddick, Sara. 1980. "Maternal Thinking." *Feminist Studies* 6(2): 342-367.

Running Start. *Running Start Programs*. Accessed 17 November 2010 <http://www.runningstartonline.org/programs>

Sapiro, Virginia. 1983. *The Political Integration of Women: Roles, Socialization, and Politics*. Urbana, IL: University of Illinois Press.

Schlesinger, Mark, and Caroline Heldman. 2001. "Gender Gap or Gender Gaps? New Perspectives on Support for Government Action and Policies." *The Journal of Politics* 63(1): 59-92

Schlozman, Kay L., Nancy Burns, & Sidney Verba. 1994. "Gender and Pathways to Participation: The Role of Resources." *The Journal of Politics* 56 (4): 963-990.

Schneider, Anne & Helen Ingram. 1990a. "Behavioral Assumptions of Policy Tools." *Journal of Politics* 52(2): 510-529.

Schneider, Anne L. & Helen Ingram. 1990b. "Policy Design: Elements, Premises, and Strategies." In Policy theory and Policy Evaluation : Concepts, Knowledge, Causes, and Norms, edited by Stuart S. Nagel, 77-101. New York: Greenwood Press.

Schneider, Anne & Helen Ingram. 1993. "Social Construction of Target Populations: Implications for Politics and Policy." *American Political Science Review* 87(2): 334-347.

Schwindt-Bayer, L. 2005. "The Incumbency Disadvantage and Women's Election to Legislative Office." *Electoral Studies* 24(2): 227-244.

Settles, Isis H., Lilia M. Cortina, Abigail J. Stewart, & Janet Malley. 2007. "Voice Matters: Buffering the Impact of a Negative Climate for Women in Science." *Psychology of Women Quarterly* 31 (3): 270-281.

Shapiro, Robert Y. & Harpreet Mahajan. 1986. "Gender Differences in Policy Preferences: A Summary of Trends From the 1960s to the 1980s." *The Public Opinion Quarterly* 50 (1): 42-61.

Simon, Rita James, Shirley Merritt Clark and Kathleen Galway. 1967."The Woman Ph.D.: A Recent Profile." *Social Problems* 15(2): 221-236.

Simon, Stefanie & Crystal L. Hoyt. 2008. "Exploring the Gender Gap in Support for a Woman President." *Analysis of Social Issues and Public Policy* 8(1): 157-181.

Smith, Tom. 1984. "The Polls: Gender and Attitudes Toward Violence." *Public Opinion Quarterly* 48: 384-386.

Spector, Paul. E. 1992. *Summated Rating Scale Construction: An Introduction.* Newbury Park, California: Sage Publications.

Steffensmeier, Darrell, Schwartz, Jennifer, Zhong, Hua, & Jeff Ackerman. 2005. "An Assessment of Recent Trends in Girls' Violence Using Diverse Longitudinal Sources: Is the Gender Gap Closing? *Criminology* 43 (2): 355–406.

Stone, Deborah. 2002. *Policy Paradox: The Art of Political Decision Making* (Revised ed.). New York: W.W. Norton and Company, Inc.

Thomas, Sue. 1991. "The Impact of Women on State Legislative Policies." *The Journal of Politics* 53 (4): 959-976.

Thomas, Sue, & Susan Welch. 1991. "The Impact of Gender on Activities and Priorities of State Legislators." *The Western Political Quarterly* 44 (2): 445-456.

Togeby, Lise. 1994. "The Gender Gap in Foreign Policy Attitudes." *Journal of Peace Research* 31(4): 375-392.

Tolich, Martin & Celia Briar. 1999. "Just Checking It Out: Exploring the Significance of Informal Gender Divisions Amongst American Supermarket Employees." *Gender Work and Organization* 6 (3): 129-133.

Ulbig, S. 2007. Gendering Municipal Government: Female Descriptive Representation and Feelings of Political Trust. *Social Science Quarterly* 88 (5): 1106-1123.

United States Department of Labor. 2008. "Women in the Labor Force in 2008." <http://www.dol.gov/wb/factsheets/Qf-laborforce-08.htm> Assessed 22 March 2011.

United States Department of Labor. 2004. "Women in the Labor Force: A Databook." <http://www.dol.gov/wb/factsheets/Qf-laborforce-08.htm> Assessed 28 April 2011.

Valian, Virginia. 1999. *Why So Slow?: The Advancement of Women*. Cambridge, MA: MIT Press.

Verba, Sidney, Nancy Burns, & Kay Schlozman. 1997. "Knowing and Caring about Politics." *Journal of Politics* 59 (4): 1051-1072.

Washington, Ebonya L. 2008. "Female Socialization: How Daughters Affect Their Legislator Fathers' Voting on Women's Issues." *The American Economic Review* 98: 311-332.

Welle, Brian, & Madeline E. Heilman. 2005. "Formal and Informal Discrimination Against Women at Work: The Role of Gender Stereotypes." In *Research in Social Issues in Management: Managing Social and Ethical Issues in Organizations*, pp. 23-40 edited by Dirk Steiner, Stephen W. Dilliland, and Dan Skarlicki. Vol. 5 Westport, CT: Information Age Publishers.

Welsh, Sandy. 1999. "Gender and Sexual Harassment." *Annual Review of Sociology* 25: 169-190.

Welch, Susan, and Albert Karnig. 1979. "Correlates of Female Office Holding in City Politics." *The Journal of Politics* 41(2): 478-491.

West, Candace, and Don H. Zimmerman. 1987. "Doing Gender." *Gender and Society* 1(2): 125-151.

Wilcox, Clyde, Lara Hewitt & Dee Allsop. 1996. "The Gender Gap in Attitudes toward the Gulf War: A Cross-National Perspective. Journal of Peace Research 33(1): 67-82.

Wirls, Daniel. 1986. "Reinterpreting the Gender Gap." *The Public Opinion Quarterly* 50(3): 316-330.

Wolbrecht, Christina, & David Campbell. 2007. "Leading by Example: Female Members of Parliament as Political Role Models." *American Journal of Political Science* 51 (4): 921-939.

Women's Campaign Forum. *Appoint Her.* Accessed 17 November 2010 < http://www.wcffoundation.org/pages/programs/appoint-her.html>

World Values Survey 1981-2008 Official Aggregate v.20090901, 2009. World Values Survey Association (www.worldvaluessurvey.org). Aggregate File Producer: ASEP/JDS, Madrid.

Wallace, Phyllis, ed. 1982. Women in the Workplace. Auburn House Publishing Company, Boston.

Wu, Ling-An, Manjula Sharma, Larissa Svirina, Joanne Baker, Anne Borg, and Peggy Fredrickx. 2002. "Topic 4: Improving the Institutional Structure and Climate for Women in Physics." *AIP Conference Proceedings* 628(1): 21-24.

Zaller, John & Stanley Feldman. 1992. "A Simple Theory of the Survey Response: Answering Questions versus Revealing Preferences." *American Journal of Political Science* 36(3): 579-616.

APPENDIX A: QUESTIONS FROM ANES 2008

Variable	Variable Wording	Coded
V085064D	How would you rate: FEMINISTS	0 – 100 (cold to warm)
V085063A	How would you rate: GEORGE W. BUSH	0 – 100 (cold to warm)
V085064M	How would you rate: THE MILITARY	0 – 100 (cold to warm)
V085065E	How would you rate: MUSLIMS	0 – 100 (cold to warm)
V085078B	Should PROMOTING AND DEFENDING HUMAN RIGHTS IN OTHER COUNTRIES be a VERY IMPORTANT foreign policy goal, a SOMEWHAT IMPORTANT foreign policy goal, or NOT AN IMPORTANT foreign policy goal at all?	Recoded into a dummy 'Very Important' = 1 'Somewhat important' and 'Not an important foreign policy goal at all' = 0
V085216X	Summary of three variables V085216: Compared to one year ago, are the chances that there will be a terrorist attack in the United States now MORE, LESS, or ABOUT THE SAME? V085216A: IF MORE CHANCE OF TERRORIST ATTACK THAN 1 YEAR AGO: Is it A GREAT DEAL more, MODERATELY more, or SLIGHTLY more? V085216B: IF LESS CHANCE OF	Recoded (reversed from original coding) 1 "a great deal less chance" 2 "moderately less chance" 3 "slightly less chance" 4 "about the same chance" 5 "slightly more chance" 6 "moderately more chance" 7 "a great deal more

	TERRORIST ATTACK THAN 1 YEAR AGO: Is it A GREAT DEAL less, MODERATELY less, or SLIGHTLY less?	chance"
V085232	Do you FAVOR, OPPOSE, or NEITHER FAVOR NOR OPPOSE the U.S. government torturing people, who are suspected of being terrorists, to try to get information?	1 "Favor" 5 "Oppose" 7 "Neither favor nor oppose"
V081109	Total in household: children under 17 years old	0-7. Created mother =1 if household children >0
V083251A	Selected Respondent: race	Recoded to four dummy variables 10. Black = dummy for Black 20. Asian = dummy for Asian 30. Native American = dummy for Other 40. Hispanic or Latino = dummy for Latino 50. White = dummy for

		White
		90. Other = dummy for Other
V081104	Selected Respondent: age	Age in years from 17 to 90
V081101	Selected Respondent: gender	Female recoded to dummy where 2=1, and 1=0
		1. Male
		2. Female
V083097	Where would you place YOURSELF on this scale, or haven't you thought much about this?	Recode to dummy for Political Partisanship
		1. Democrat = Democrat dummy
		2. Republican = Republican dummy
		3. Independent = Independent dummy
		4. Other Party = Other Party dummy
		5. No Preference = Other Party
		dummy
V083217	What is the highest grade of school or year of college you have completed?	0-17
V083181	Do you consider religion to be an IMPORTANT part of your life, or NOT?	Recode to dummy
		1. Important
		0. Not Important

V085251A	MAJOR RELIGION GROUP (PRELOAD)	Recoded into dummies for each category 1. Protestant 2. Catholic 3. Jewish 7. Other
V085163 V085165 V085166	'We have gone too far in pushing equal rights in this country.' 'This country would be better off if we worried less about how equal people are.' 'It is not really that big a problem if some people have more of a chance in life than others.'	Coding for each question is the same as follows 1. Agree strongly 2. Agree Somewhat 3. Neither agree nor disagree 4. Disagree Somewhat 5. Disagree strongly
V085193	How closely did you follow the election campaign?	Reversed from original coding 1. Not closely at all 2. Not very closely 3. Fairly closely 4. Very closely

APPENDIX B: HERI SURVEY

Listing of Department Coding and Percentage of Women in UNCC Department				
Department Coding in Heri	Department at UNCC	1999-2000	2003-2004	2007-2008
*9 – Physiology, Anatomy	Biology	41.67	36	40.62
*11 – General, Other Biological Sciences	Biology	41.67	36	40.62
12 – Accounting	Accounting	14.29	42.86	35.71
13 – Finance	Finance and Business Law	0	0	13.33
15 – Management	Management	35.29	47.06	50
16 – Marketing	Marketing	42.86	44.44	33.33
18 – General, Other Business	Business Administration and Business Information Systems and Operations Management	23.33	11.76	35.71
20 – Educational Administration	Educational Leadership	16.67	41.18	31.25
21 – Educational Psychology/Counseling[45]	Counseling	70.83	66.67	45.45
22 – Elementary Education	Reading and Elementary	53.33	64.71	54.17

[45] In the same department with Special Education and Child Development in the lagged measures for 1999 and 2003

	Educ			
25 – Physical or Health Education	Kinesiology	42.86	38.46	43.75
26 – Secondary Education	Middle, Seconday, K-12 Education	47.37	71.43	55.56
27 – Special Education[46]	Special Education and Child Development	70.83	66.67	72
28 – General, Other Education Fields	Education	90	77.78	100
*31 – Civil Engineering	Civil Engineering	18.18	7.14	10.53
*32 – Electrical Engineering	Electrical Engineering	14.29	0	4.17
*33 – Industrial Engineering	Mechanical Engineering and Engineering Science	4.54	4.76	12.5
*34 – Mechanical Engineering	Mechanical Engineering and Engineering Science	4.54	4.76	12.5
*35 – General, Other Engineering Fields	"Engineering Technology and Engineering	5	13.04	22.22
39 – Nursing	School or Nursing	88.89	90	93.55

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[46] In the same department with Counseling in the 1999 and 2003 lagged measures.

43 – General, Other Health Fields	Health and Human Service, Human Behavior and Administration and Kinesiology	42.86	50.00	61.54
44 – History	History	23.53	38.1	37.93
45 – Political Science, Government	Political Science	25.58	30	33.33
46 – English Language and Literature	English	45.45	49.45	58.82
47 – Foreign Languages and Literature	Languages and Culture Studies	56.52	56	62.86
50 – Spanish	Languages and Culture Studies	56.52	56	62.86
51 – Other Foreign Languages	Languages and Culture Studies	56.52	56	62.86
53 – Philosophy	Philosophy	27.27	46.15	33.33
54 – Religion and Theology	Religious Studies	33.33	38.46	57.14
55 – General, Other Humanities Fields	---		---	
56 – Architecture/Urban Planning	Architecture	26.09	36	30

57 – Art	Art	57.89	64	53.57
58 – Dramatics or Speech	Dance and Theater	58.33	41.18	34.78
59 – Music	Music	22.22	18.18	21.43
61 – Other Fine Arts	---		---	
*62 – Mathematics and/or Statistics	Mathematics	16.28	21.57	22.81
*65 – Chemistry	Chemistry	20	27.27	33.33
*66 – Earth Sciences	Geography and Earth Science	19.05	25	23.33
*67 – Geography	Geography and earth science	19.05	25	23.33
*69 – Physics	Physics and Optical Science	8.33	13.33	25
*70 – General, Other Physical Sciences	---	---	---	---
71 – Anthropology	Sociology and Anthropology	51.85	59.09	60
73 – Clinical Psychology	Psychology	37.93	40.74	45.71
74 – Counseling and Guidance	Counseling, Special Education and Child Development	70.83	66.67	45.45
75 – Experimental	Psychology	37.93	40.74	45.71

Psychology				
77 – General, Other Psychology	Psychology	37.93	40.74	45.71
78 – Economics	Economics	23.53	21.05	25
79 – Sociology	Sociology and Anthropology	51.85	59.09	57.89
80 – Social Work, Social Welfare	Social work[47]	51.85	72.73	64.29
81 – General, Other Social Sciences	---		----	
*82 – Computer Science	Computer Science	5.88	21.05	35.48
*83 – Data Processing, Computer Programming	Software and Information Systems	5.88	10	21.43
90 – Communications	Communication Studies	50	60	61.11
91 – Ethnic Studies	Language and Culture Studies	56.52	56	62.86
94 – Law	---	----	---	---
95 – Law Enforcement	Criminal Justice	75	54.54	42.86
99 – All Other Fields	---	---	---	---
*=STEM department				

2007-2008 HERI Faculty Survey

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[47] Social Work part of the Sociology and Anthropology department in the 1999-2000 school year

NOTE: The 2007-2008 HERI Faculty Survey is a web-based survey and therefore this document does not reflect the web-based formatting.

1. What is your principal activity in your current position at this institution?

Administration

Teaching Research

Services to clients and patients

Other

2. Are you considered a full-time employee of your institution for at least nine months of the current academic year?

Yes   No

_____

PART-TIME FACULTY

These questions will only be included for part-time faculty.

2a. If given the choice, I would prefer to work full-time at this institution.

Yes   No

2b. Mark all institutional resources available to you in your last term as part-time faculty.

(Mark all that apply) Use of private office

Shared office space

A personal computer

An email account

A phone/voicemail

Teaching assistance

2c. Please indicate your agreement with the following statements:

(Responses: Agree Strongly, Agree Somewhat, Disagree Somewhat, Disagree Strongly)

Part-time instructors at this institution:

Are given specific training before teaching

Rarely get hired into full-time positions

Receive respect from students

Are primarily responsible for introductory classes

Have no guarantee of employment security

Have access to support services

Are compensated for advising/counseling students

Are required to attend meetings

Have good workshop relationships with the administration

Are respected by full-time faculty

_____

3. What is your present academic rank?

Professor

Associate Professor

Assistant Professor

Lecturer

Instructor

4. What is your tenure status at this institution?

Tenured

On tenure track, but not tenured

Not on tenure track, but institution has tenure system

Institution has no tenure system

COMMUNITY COLLEGE

These questions will only be included for community colleges, and will replace questions 3 and 4 when the survey is used by community colleges.

3. What is your current status at this institution?

Probationary,

Tenure Track Probationary,

Non-Tenure Track Renewable Contract

Instructor Non-Probationary

Tenured

4. What is your present academic?

Acting Instructor

Instructor

Assistant Professor Associate Professor Professor

Emeritus

---

5. Are you currently serving in an administrative position as: (Mark all that apply)

Department chair

Dean (Associate or Assistant) President

Vice-President

Provost

Other

Not Applicable

6. My primary place of employment in the last year was: (Mark <u>one</u>)

In higher education, at this institution

In higher education, at a different institution

In higher education, at more than one institution

Not in higher education

 Not employed

7. Personally, how important to you is:

(Responses: Essential, Very Important, Somewhat Important, Not Important)

Research

Teaching

Service

8. On the following list, please mark <u>one</u> in each column:

Highest Degree Earned

Degree Currently Working On

Bachelor's (B.A., B.S., etc.

Master's (M.A., M.S., M.F.A., M.B.A., etc. LL.B., J.D.

M.D., D.D.S. (or equivalent)

Other first professional degree beyond B.A. (e.g., D.D., D.V.M.) Ed.D.

Ph.D.

Other degree

None

9. From what higher education institution did you receive your Bachelor's Degree? (Please

enter complete Institution Name and City)

Institution Name_____

_____

City

State (Drop down)____

Country   _____

10. From what higher education institution did you receive your highest degree? (Please

enter complete Institution Name and City)

Institution Name_____

_____

City

State (Drop down)____

Country   _____

11. During the past two years, have you engaged in any of the following activities?

(Responses: Yes, No)

Taught an honors course

Taught an interdisciplinary course

Taught an ethnic studies course

Taught a women's studies course

Team-taught a course

Taught a service learning course

Placed or collected assignments on the internet

Taught a course exclusively on the internet

Participated in a teaching enhancement workshop

Advised student groups involved in service/volunteer work

Collaborated with the local community in research/teaching

Developed a new course

Conducted research or writing focused on:

       International/global issues

       Racial or ethnic minorities

       Women and gender issue

Taught a seminar for first-year students

Engaged undergraduates on <u>your</u> research project

Worked with undergraduates on a research project

12. During the present term, how many hours per week on average do you actually spend on each of the following activities?

(Responses: None, 1-4, 5-8, 9-12, 13-16, 17-20, 21-34, 35-44, 45+)

Scheduled teaching (give actual, not credit hours)

Preparing for teaching (including reading student papers and grading)

Advising and counseling of students

Committee work and meetings

Other administration

Research and scholarly writing

Other creative products/performances

Consultation with clients/patients

Community or public service

Outside consulting/freelance work

Household/childcare duties

Communicating via email

Commuting to campus

Other employment, outside of academia

13. Including all institutions at which you teach, how many undergraduate courses are you teaching this term?_____

How many students are enrolled in these courses? Course 1: _____

Course 2: _____Etc. (depending on answer given in #13)

14. How many of the following courses are you teaching this academic year?

(Responses: 0, 1, 2, 3, 4, 5+)

General education courses

Developmental/remedial courses

Other undergraduate credit courses

Graduate courses

Vocational or technical courses

Non-credit courses (other than above)

15. Do you teach remedial/developmental skills in any of the following areas?

(Mark all that apply)

Reading

Writing

 Mathematics

 ESL

General academic skills

Other subject areas

16. Have you engaged in any of the following professional development

 opportunities at your institution?

(Responses: Yes, No, Not eligible, Not available)

Workshops focused on teaching in the classroom

Paid workshops outside the institution focused on teaching

Paid sabbatical leave

Travel funds paid by the institution

Association membership/dues paid by the institution

Tuition remission

Internal grants for research

Training for administrative leadership

17. Indicate the importance to you of each of the following education goals for

 undergraduate students:

(Responses: Essential, Very Important, Somewhat Important, Not important)

Develop ability to think critically

Prepare students for employment after college

Prepare students for graduate or advanced education

 Develop moral character

Provide for students' emotional development

Prepare students for family living

Teach students the classic works of Western civilization

Help students develop personal values

Enhance students' self-understanding

Instill in students a commitment to community service

Enhance students' knowledge of and appreciation for other racial/ethnic groups

Study a foreign language

Help master knowledge in a discipline

Develop creative capacities

Instill a basic appreciation of the liberal arts

Promote ability to write effectively

Help students evaluate the quality and reliability of information

Engage students in civil discourse around controversial issues

Teach students tolerance and respect for different beliefs

 Encourage students to become agents of social change

18. How many of the following have you published?

(Responses: None, 1-2, 3-4, 5-10, 11-20, 21-50, 51+)

Articles in academic or professional journals

Chapters in edited volumes

Books, manuals, or monographs

Other, such as patents, or computer software products

19. How many exhibitions or performances in the fine or applied arts have you presented
 in the last two years?

(Responses: None, 1-2, 3-4, 5-10, 11-20, 21-50, 51+)

20. How many of your professional writings have been published or accepted for
 publication in the last two years?

(Responses: None, 1-2, 3-4, 5-10, 11-20, 21-50, 51+)

21. For each of the following items, please mark either Yes or No.

(Responses: Yes, No)

Are you a member of a faculty union? Are you a U.S. citizen?

Were you born in the U.S.A.?

Do you plan to retire within the next three years?

Do you use your scholarship to address local community needs?

Have you been sexually harassed at this institution?

Have you ever interrupted your professional career for more than one year for family reasons?

 Have you ever received an award for outstanding teaching?

Have you published op-ed pieces or editorials?

 Is (or was) your father an academic?

Is (or was) your mother an academic?

Is (or was) your spouse/partner an academic?

Are you currently teaching courses at more than one institution?

22. During the past two years, have you:

(Responses: Yes, No)

Considered early retirement?

Considered leaving academe for another job?

Considered leaving this institution for another?

Changed academic institutions?

Engaged in paid consulting outside of your institution?

Engaged in public service/professional consulting without pay?

 Received at least one firm job offer?

Received funding for your work from: Foundations?

State or federal government? Business or industry?

Requested/sought an early promotion?

23. If you were to begin your career again, would you:

(Responses: Definitely yes, Probably yes, Not sure, Probably no, Definitely no)

Still want to come to this institution? Still want to be a college professor?

24. Indicate how well each of the following describes your college or university:

(Responses: Very Descriptive, Somewhat Descriptive, Not Descriptive)

It is easy for students to see faculty outside of regular office hours

There is a great deal of conformity among the students

The faculty are typically at odds with campus administration

Faculty here respect each other

Most students are treated like "numbers in a book"

Social activities are overemphasized

Faculty are rewarded for being good teachers

There is respect for the expression of diverse values and beliefs

Faculty are rewarded for their efforts to use instructional technology

Faculty are rewarded for their efforts to work with underprepared students

Administrators consider faculty concerns when making policy

The administration is open about its policies

25. Please indicate the extent to which you:

(Responses: To a Great Extent, To Some Extent, Not at All)

Engage in academic work that spans multiple disciplines

Feel that the training you received in graduate school prepared you well for your role as a
 faculty mentor

Achieve a healthy balance between your personal life and your professional life

Experience close alignment between your work and your personal values

Feel that you have to work harder than your colleagues to be perceived as a legitimate
 scholar

Mentor new faculty

26. How satisfied are you with the following aspects of your job?

 (Responses: Very Satisfied, Satisfied, Marginally Satisfied, Not Satisfied, Not

 Applicable)

Salary

Health benefits

Retirement benefits

Opportunity for scholarly pursuits

Teaching load Quality of students Office/lab space

Autonomy and independence

Professional relationships with other faculty

 Social relationships with other faculty

Competency of colleagues

Visibility for jobs at other institutions/organizations

Job security

Relationship with administration

Departmental leadership

Course assignments

Freedom to determine course content

Availability of child care at this institution

Prospects for career advancement

Clerical/administrative support

Overall job satisfaction

27. Below are some statements about your college or university.

Indicate the extent to which you agree or disagree with each of the following:

(Responses: Agree Strongly, Agree Somewhat, Disagree Somewhat, Disagree Strongly)

Faculty are interested in students' personal problems

Racial and ethnic diversity should be more strongly reflected in the curriculum

Faculty feel that most students are well-prepared academically

This institution should hire more faculty of color

Student Affairs staff have the support and respect of faculty

Faculty are committed to the welfare of this institution

Faculty here are strongly interested in the academic problems of undergraduates

There is a lot of campus racial conflict here

Most students are strongly committed to community service

My research is valued by faculty in my department

My teaching is valued by faculty in my department

Many courses include feminist perspectives

Faculty of color are treated fairly here

Women faculty are treated fairly here

Many courses involve students in community service

This institution should hire more women faculty

Gay and lesbian faculty are treated fairly here

My department does a good job of mentoring new faculty

Faculty are sufficiently involved in campus decision making

My values are congruent with the dominant institutional values

There is adequate support for integrating technology in my teaching

This institution takes responsibility for educating underprepared students

The criteria for advancement and promotion decisions are clear

Most of the students I teach lack the basic skills for college level work

There is adequate support for faculty development

This institution should not offer remedial/developmental education

28. Indicate how important you believe each priority listed below is at your college or
 university:

(Responses: Highest Priority, High Priority, Medium Priority, Low Priority)

To promote the intellectual development of students

To help students examine and understand their personal values

To develop a sense of community among students and faculty

To facilitate student involvement in community service

To help students learn how to bring about change in American society

To increase or maintain institutional prestige

To hire faculty "stars"

To recruit more minority students

To enhance the institution's national image

To create a diverse multi-cultural campus environment

To promote gender equity among faculty

To provide resources for faculty to engage in community-based teaching or research

To create and sustain partnerships with surrounding communities

To pursue extramural funding

To increase the representation of minorities in the faculty and administration

To strengthen links with the for-profit, corporate sector

To develop leadership ability among students

To increase the representation of women in the faculty and administration

To develop an appreciation for multiculturalism

29. Please indicate your agreement with each of the following statements:

(Responses: Agree Strongly, Agree Somewhat, Disagree Somewhat, Disagree Strongly)

Western civilization and culture should be the foundation for the undergraduate

curriculum

College officials have the right to ban persons with extreme views from speaking
campus

The chief benefit of a college education is that it increases one's earning power

Promoting diversity leads to the admission of too many underprepared students

Colleges should be actively involved in solving social problems

Tenure is an outmoded concept

Colleges should encourage students to be involved in community service activities

Community service should be given weight in college admissions decisions

A racially/ethnically diverse student body enhances the educational experience of all
students

Realistically, an individual can do little to bring about changes in society

Colleges should be concerned with facilitating undergraduate students' spiritual
development

Colleges have a responsibility to work with their surrounding communities to address
local issues

Private funding sources often prevent researchers from being completely objective in the
conduct of their work

30. Please indicate the extent to which each of the following has been a source of stress
for you during the last two years:

(Responses: Extensive, Somewhat, Not at All, Not Applicable)

Managing household responsibilities

Child care

Care of elderly parent My physical health

Health of spouse/partner

Review/promotion process

Subtle discrimination (e.g., prejudice, racism, sexism)

Personal finances

Committee work Faculty meetings Colleagues Students

Research or publishing demands

Institutional procedures and "red tape" Teaching load

Children's problems

Friction with spouse/partner

Lack of personal time

Keeping up with information technology

Job security

Being part of a dual career couple

Working with underprepared students

Classroom conflict

Self-imposed high expectations

Change in work responsibilities

31. Indicate the importance to you personally of each of the following:
 (Responses: Essential, Very Important, Somewhat Important, Not Important)
 Becoming an authority in my field

Influencing the political structure

Influencing social values

Raising a family

Becoming very well off financially

Helping others who are in difficulty

Becoming involved in programs to clean up the environment

Developing a meaningful philosophy of life

Helping to promote racial understanding

Obtaining recognition from my colleagues for contributions to my special field

Integrating spirituality into my life

32. In your interactions with undergraduates, how often do you encourage them to:

(Responses: Frequently, Occasionally, Not at all)

Ask questions in class

Support their opinions with a logical argument

Seek solutions to problems and explain them to others

Revise their papers to improve their writing

Evaluate the quality or reliability of information they receive

Take risks for potential gains

Seek alternative solutions to a problem

Look up scientific research articles and resources

Explore topics on their own, even though it was not required for a class

Acknowledge failure as a necessary part of the learning process

Seek feedback on their academic work

33. In how many of the courses that you teach do you use each of the following?

(Responses: All, Most, Some, None)

Evaluation Methods

Multiple-choice exams

Essay exams

Short-answer exams

Quizzes

Weekly essay assignments Student presentations

Term/research papers

Student evaluations of each others' work

Grading on a curve

Competency-based grading

Instructional Techniques/Methods

Class discussions

Cooperative learning (small groups)

Experiential learning/Field studies

Teaching assistants

Recitals/Demonstrations

Group projects

Extensive lecturing

Multiple drafts of written work Readings on racial and ethnic issues

Readings on women and gender issues

Student-developed activities (assignments, exams, etc.)

Student-selected topics for course content

Reflective writing/journaling

Community service as part of coursework

Electronic quizzes with immediate feedback in class

Using real-life problems

Using student inquiry to drive learning

34. Please enter your base institutional salary (e.g., $56,000)

$_____

35. Your base institutional salary reported above is based on:

9/10 months

11/12 months

36. What percentage of your current year's income comes from: (enter the amount on scale of 0-100%)

Income from this institution	%
Other academic income	%
Non-academic income	%

37. Please enter the four-digit year that each of the following occurred (e.g., 1944, 2001, etc.).

Year of birth   ____

Year of highest degree now held_____ ____

 Year of appointment at present institution   _____

If tenured, year tenure was awarded   _____

____

38. Please select the most appropriate general area and disciplinary field for the following:

(See Appendix A)

Major of highest degree held _____

Department of Current Faculty Appointment _____

39. How many children do you have in the following age ranges?

(Responses: 0, 1, 2, 3, 4+)

Under 18 years old

18 years or older

40. How would you characterize your political views?

Far Left

Liberal

Middle of the Road

Conservative

Far Right

41. Are you currently: (Mark <u>one</u>)

Single

Married

Unmarried, living with partner

Divorced

Widowed

Separated

42. Your sex:

Male

Female

43. Is English your native language?

Yes   No

44. Are you: (Mark <u>all</u> that apply)

White/Caucasian

African American/Black American

Indian/Alaska Native Asian

American/Asian

Native Hawaiian/Pacific Islander

Mexican American/Chicano Puerto Rican

Other Latino

Other

45. Do you give the Higher Education Research Institute (HERI) permission to retain your contact information (i.e., your email address and name) for possible follow-up research?

HERI maintains strict standards of confidentiality and will not release your identifying information.

Yes   No

If "Yes" please confirm your email address_____

46 to 65. Local Optional Questions (20 total)

(Responses: A, B, C, D, E)

46. Are there institutional incentives for faculty to seek promotion to full professor?

No

Not sure

Yes

47. If you are not yet a full professor, do you perceive institutional incentives for you to seek promotion to full professor? A – B – C –

No

Not sure

Yes

48. How important for your professional career is it (was it) for you to be promoted to

full professor?

not at all important

somewhat important

definitely important

49. How important for your personal satisfaction/sense of accomplishment is it (was it)

for you to be promoted to full professor?

not at all important

somewhat important

definitely important

50. Does your institution encourage faculty to maintain a healthy balance between work

LIFE AND personal life?

not at all

somewhat

definitely

51. Does your institution offer incentives for faculty to maintain a healthy balance

between work life and personal life?

not at all

somewhat

definitely

52. Does your work load at your institution allow you to maintain a healthy balance

 between work life and personal life?

not at all

somewhat

definitely

53. Whether or not you have small children, do you believe that an on-campus child care facility would make the University a more desirable place to work for UNC Charlotte employees?

definitely no

probably no

not sure

probably yes

definitely yes

54. Do you have small children (plan to have children) who attend a child care facility?

yes

no

not sure about future children

55. If an on-campus child care facility were available and you had small children, would you use the facility?

definitely no

probably no

not sure

probably yes

definitely yes

56. How important would cost of a child care facility be in influencing your decision to use a child care facility?

not at all

somewhat

definitely

57. How important would flexibility of hours of a child CARE FACILITY BE IN INFLUENCING

your decision to use a child care facility?

not at all

somewhat

definitely

58. How important would part-time use of a child care facility be in influencing your

decision to use a child care facility?

not at all

somewhat

definitely

59. How important would 12 month availability be in influencing your decision to use a

child care facility?

not at all

somewhat

definitely

60. How important would evening hours of a child care facility be in influencing your

decision to use a child care facility?

not at all

somewhat

definitely

61. How important would a summer only option of a child care facility be in influencing your decision to use a child care facility?

not at all

somewhat

definitely

62. How important would the quality of staff in a child care facility be in influencing your decision to use a child care facility?

not at all

somewhat

definitely

63. How important would the quality of a developmental child care curriculum be in influencing your decision to use a child care facility?

not at all

somewhat

definitely

64. How important would safety of a child care facility be in influencing your decision to use a child care facility?

not at all

somewhat

definitely

65. If an on-campus child care facility were available at a competitive price (comparable to off campus facilities), how likely would you be to use the facility sometime over the

next three years?

definitely not

probably not

not sure

probably yes

definitely yes

Heri Faculty Survey – Appendix A

Major/ Department Coding

1=Agriculture

2=Forestry

3=Bacteriology, Molecular Biology

4=Biochemistry

5=Biophysics

6=Botany

7=Environmental Science

8=Marine (life) Sciences

9=Physiology, Anatomy

10=Zoology

11=General, Other Biological Sciences

12=Accounting

13=Finance

14=International Business

15=Management

16=Marketing

17=Secretarial Studies

18=General, Other Business

19=Business Education

20=Educational Administration

21=Educational Psychology/Counseling

22=Elementary Education

23=Higher Education

24=Music or Art Education

25=Physical or Health Education

26=Secondary Education

27=Special Education

28=General, Other Education Fields

29=Aero-/Astronautical Engineering

30=Chemical Engineering

31=Civil Engineering

32=Electrical Engineering

33=Industrial Engineering

34=Mechanical Engineering

35=General, Other Engineering Fields

36=Dentistry

37=Health Technology

38=Medicine or Surgery

39=Nursing

40=Pharmacy, Pharmacology

41=Therapy (speech, physical, occup.)

42=Veterinary Medicine

43=General, Other Health Fields

44=History

45=Political Science, Government

46=English Language & Literature

47=Foreign Languages & Literature

48=French

49=German

50=Spanish

51=Other Foreign Languages

52=Linguistics

53=Philosophy

54=Religion or Theology

55=General, Other Humanities Fields

56=Architecture/Urban Planning

57=Art

58=Dramatics or Speech

59=Music

60=Television or Film

61=Other Fine Arts

62=Mathematics and/or Statistics

63=Astronomy

64=Atmospheric Sciences

65=Chemistry

66=Earth Sciences

67=Geography

68=Marine Sciences (incl. Oceanography)

69=Physics

70=General, Other Physical Sciences

71=Anthropology

72=Archaeology

73=Clinical Psychology

74=Counseling and Guidance

75=Experimental Psychology

76=Social Psychology

77=General, Other Psychology

78=Economics

79=Sociology

80=Social Work, Social Welfare

81=General, Other Social Sciences

82=Computer Science

83=Data Processing, Computer Prog.

84=Drafting/Design

85=Electronics

86=Industrial Arts

87=Mechanics

88=Other Technical

89=Building Trades

90=Communications

91=Ethnic Studies

92=Human Ecology/Family Science

93=Journalism

94=Law

95=Law Enforcement

96=Library Science

97=Women's Studies

98=Other Vocational

99=All Other Fields

APPENDIX C: ISSP DATA

Included is a listing of all the countries surveyed in each study with total number of interviews. The interviews include male and female respondents.

International Social Survey Program (ISSP). International Social Survey Program: Family And Changing Gender Roles III, 2002 [Computer file]. ICPSR version. Cologne, Germany: Zentralarchiv fur Empirische Sozialforschung [producer], 2004. Cologne, Germany: Zentralarchiv fur Empirische Sozialforschung/Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributors], 2004.

States Surveyed in Dataset	
Country	Surveys
Australia	1352
*Austria	2047
Brazil	2000
Bulgaria	1003
*Cyprus	1004
Czech Republic	1289
*Denmark	1379
Finland	1353
*Flanders	1360
*France	1903
*Germany (East)	431
*Germany (West)	936
*Great Britain	1960
Hungary	1023
*Ireland	1240

*Israel Jews, Arabs	1209
Japan	1132
Latvia	1000
Mexico	1495
*Netherlands	1249
New Zealand	1025
*Northern Ireland	987
Norway	1475
Philippines	1200
*Poland	1252
*Portugal	1092
Republic of Chile	1505
*Russia	1798
Slovak Republic	1133
*Slovenia	1093
Spain	2471
Sweden	1080
*Switzerland	1008
*Taiwan	1983
United States	1171
Total	46,638
*These counties are not included in the analysis because they were missing information of the independent variable, equality culture, ideology, religion or rural measures	