Clocks and Clouds

AMERICAN UNIVERSITY'S UNDERGRADUATE RESEARCH JOURNAL

Elizabeth Calos
The Weakest Link: Credible Deterrence Threats and Alliance Entrapment

Allison Dunatchik
A Vote of No (Self)-Confidence: Gender, Socialization, and Political Ambition Among Students

Leigh Maltby
Tested and Found Wanting: A Quantitative Analysis of Legal Integration in the Member States of the 2004 European Union Enlargement

Caitlin McGonnigal
Karl Marx and the Fair Trade Chocolate Industry in the Ivory Coast

Elise Roberts
The Educational Gender Gap in Latin America: Why Some Girls Do Not Attend School

Colin Benz
"Türkenproblematik" 2011: Views of German Youth towards the Turkish Minority

Joe Wisniewski
The State's Struggle to Master Asymmetrical Warfare

VOLUME II, FALL 2012

AMERICAN UNIVERSITY'S UNDERGRADUATE RESEARCH JOURNAL

CLOCKS AND CLOUDS

VOLUME 11, *FALL 2012*

INTRODUCTION

Over the past semester, we have been thrilled to see Clocks and Clouds grow from a fledgling journal into a campus institution. The desire to establish a premiere outlet for undergraduate research in political science and international relations at American University brought together students, faculty, and administration last year, and it has continued to push the journal forward as we strive to carve out our place on campus. Our talented and dedicated student contributors have elevated the quality of the journal, and it has been an honor to work with all of them as authors, staff, and reviewers. While the editors keep the process on track, the success of the journal is really due to the tremendous effort that each and every one of the students has put into the journal. This issue of Clocks and Clouds is truly their journal.

We received a large amount of excellent research and we are excited to be publishing the work of the seven authors. Each author contributes new ideas to their field, either through their novel methodological approaches or their completely new way of framing the issue. These authors show us that exemplary scholarship unites both analytical rigor and real-world relevance. They have the potential to change the way we think about some of the most puzzling questions in the modern social sciences. Although their topics seem to come from disparate subjects, the quality of research unites these authors as examples of the best undergraduate researchers that American University has to offer.

The articles in this issue examine a wide range of national and international issues. Some authors decided to re-examine old theories, updating them for an ever-changing world. Leigh Maltby and Colin Benz bring us scholarship on European legal integration and xenophobia in Germany by analyzing the most recent data on the 2004 European Union enlargement and Germany's youth, respectively, according to the previous theories in each area. Meanwhile, Caitlin McGonnigal shows us how Marxist ideology, which had previously been dismissed as outdated, is actually highly relevant in thinking about fair trade.

Other authors decided to look at the inequalities in our world and how they came to be, specifically a gap between men and women. Elise Roberts analyzed the causes of the gender gap in education around the world, ending with policy recommendations that could shift the way we think about investment in education. Similarly, Allison Dunatchik also examines a gender gap, shifting the focus to the more local issue of student government participation. By studying the gender imbalance in student government participation, she provides us with valuable insight into the issue of female political representation.

Finally, several authors chose to study issues in international security, helping us to understand the complex connections between the many international actors that make up our world. Elizabeth Calos gives us a quantitative examination of alliances by investigating the relationship between alliance membership and conflict participation, which allows us to make more sense of the complex web of international alliances between states. Additionally, Joe Wisniewski looks at the relationship between state and non-state actors in asymmetrical warfare, providing insight into questions that are as old as warfare itself.

Clocks and Clouds is based on the premise that undergraduates have ideas that matter. Although we do not claim that our work will change the world overnight, we are convinced that the ideas we present can make genuine contributions to a broader academic dialog. We believe Clocks and Clouds can help shape and voice the extraordinary ideas of American University undergraduates, and showcase the real power that research can have. It is our sincere hope that this journal will continue to do so for years to come.

Carly Kinney
EDITOR IN CHIEF

Crystal Shatzer Espie
MANAGING EDITOR

CLOCKS AND CLOUDS FALL 2012 STAFF

FACULTY ADVISOR	Professor Kimberly Cowell-Meyers
	Professor Dylan Craig
EDITOR-IN-CHIEF	Carly Kinney
MANAGING EDITOR	Crystal Shatzer Espie
ASSISTANT MANAGING EDITORS	Sean Dugdale
	Maria Cribbs
	Ozzie Chung
	Emily Jorgensen
	Nathan Thompson
MARKETING DIRECTOR	Steven Ballew
ASSISTANT MARKETING DIRECTORS	Allison Butler
	Habib-Emmanuel Abraham
	Stephanie Fabro
PRODUCTION MANAGER	Jasmine Guo
ASSISTANT PRODUCTION MANAGERS	Amanda Sands
	Ananya Marathe
REVIEWERS	Aubrey Rose
	Brian Kim
	Dakota Freeze
	David Troy
	Fito Akinrinade
	Jesse Bruner
	Karanpreet Takhar
	Kirsten Ashbaugh
	Leigh Maltby
	Pranay Ahluwalia
	Richard Bartoldus
	Sam Cho
	Tessie Burdette

TABLE OF CONTENTS

Elizabeth Calos
The Weakest Link: Credible Deterrence Threats and Alliance Entrapment 1

Allison Dunatchik
A Vote of No (Self)-Confidence: Gender, Socialization, and Political Ambition Among Students 17

Leigh Maltby
Tested and Found Wanting: A Quantitative Analysis of Legal Integration in the Member States of the 2004 European Union Enlargement 57

Caitlin McGonnigal
Karl Marx and the Fair Trade Chocolate Industry in the Ivory Coast 85

Elise Roberts
The Educational Gender Gap in Latin America: Why Some Girls Do Not Attend School 97

Colin Benz
"Türkenproblematik" 2011: Views of German Youth towards the Turkish Minority 129

Joe Wisniewski
The State's Struggle to Master Asymmetrical Warfare 155

THE WEAKEST LINK: CREDIBLE DETERRENCE THREATS AND ALLIANCE ENTRAPMENT

Elizabeth Calos

Abstract

Over the past 20 years, the international order has been characterized by the conflict between the United States' desire for isolationism and its desire to maintain hegemony. While the United States has initiated and continued wars in Afghanistan and Iraq that are increasingly unpopular with alliance members, it has also focused on increasing NATO buy-in and has become involved in conflicts, like the one in Libya, at the insistence of its NATO partners. These contradictory trends raise interesting questions about the importance of defensive alliances as a method of deterring conflict. The United States has picked and chosen which conflicts to pursue, regardless of the desires of alliance members. This raises the question of whether strong states suffer from alliance entrapment, a phenomenon in which defensive alliance partners can force other partners to intervene in conflicts that are outside of the scope of the alliance. Scholars have long argued that defensive alliances do not force states to enter into more conflicts in order to protect their partners. However, scholars have not tested these claims while controlling for state strength. This paper will examine whether weaker alliance members are more likely to be drawn into conflicts originated by stronger alliance members. In order to test these two premises, this paper will utilize a quantitative study of conflicts between 1995 and 2000 to examine whether alliance membership impacts the decision of states to join in conflicts originated by alliance members. Ultimately, this paper will determine that weaker alliance members do decide to intervene in conflicts based on alliance membership, but strong states do not feel the same compulsion. This has important implications for scholarship because it demonstrates that alliance behavior is measurably different for states of differing strengths and that weaker states are more likely to be drawn into conflicts when they are in a defensive alliance with the conflict originator.

Puzzle

In the early days of the Libyan uprising, there was little US interest in becoming involved in the conflict. The United States was already involved in multiple costly wars overseas, and Libya was not necessary to the overall security strategy. Nevertheless, on March 16th, the United States became officially involved in aiding to establish a no-fly zone in Libya (United Nations Security Council 2011). Despite little strategic interest and even less desire to intervene, the United States eventually funded and carried out the majority of the operations in Libya. Some have suggested that the decision to intervene was largely a result of external pressure placed on the United States by allies within NATO, particularly France. In this case, it seems as though the United States' defensive alliance partners were able to coerce the United States into becoming involved in a conflict which did not necessarily meet the bounds of the North Atlantic Treaty. Conversely, the United States has also refused to intervene

in some conflicts despite the desires of alliance members. France and Belgium lobbied the United States to help end the Rwandan genocide after France intervened in 1994 (Taha 2011, 34). The United States refused to participate and did not send troops or otherwise support its alliance members in this conflict. This situation demonstrates two competing trends in the capacity of alliances to trap a state into entering into a conflict against its will. The United States occasionally succumbs to alliance pressures, but it is not always forced to intervene against its will. So, do alliances actually force states to intervene in conflicts against their will?

The potential for defensive alliances to result in an intervention that is outside the bounds of a state's foreign policy interests has several important policy implications. The United States and other governments have used defensive alliances as a way of increasing the overall security of the state. If defensive alliances actually force states to intervene in areas against their interests, then they would actually diminish the overall security of the state rather than increase it. Since these alliances are meant to increase the security of the state, a finding that member states are drawn into more conflicts would demonstrate that these alliances are not an effective deterrent. This might have greater policy implications down the road, as states must make the decision whether or not to enter into an alliance. Thus, there are important policy issues at stake when examining whether or not defensive alliances truly minimize conflict or merely cause a state to be pulled into conflicts that they have not chosen.

Thus, this paper will attempt to determine if all states are drawn into conflicts originated by alliance members equally across different levels of state strength. There is a wide body of literature which examines the efficacy of alliances in preventing violent conflict. However, there is little research which specifically examines the internal dynamics of defensive alliances. Most of this research does not distinguish between when a third party joins in conflicts that were originated by the alliance member or conflicts that were originated by another party. While there is a large literature base concerning the efficacy of defensive alliances in protecting states against outside aggressors, there is less empirical research examining whether states in defensive alliances are forced to join in when alliance members originate a conflict. In addition, little of this literature focuses on the impact of state strength in terms of the potential for alliance entrapment. Thus, this paper will contribute to the scholarship on the efficacy of alliances as a deterrent to conflict by examining whether and how alliance members are drawn into conflicts they did not initiate.

Research Question

This paper will attempt to determine why some states are drawn into conflicts by defensive alliance members which are outside of the bounds of the defensive alliance and the best interests of the state when others are not. Alliances are supposed to demonstrate a credible threat which makes the cost of conflict higher for potential adversaries. This should hold true across different levels of state strength. Thus, defensive alliance partners should only be drawn into conflict very rarely because few potential adversaries would wish to challenge a state which has multiple partners to defend it. However, most scholars would also agree that the strength of the deterrent threat is tied to the relative strength potentially lose in the conflict. A loss of strength to any alliance member weakens the deterrent threat and makes each member less secure. This is true across all levels of state strength but is particularly worrisome for weaker states. A stronger state would lose comparatively less security when the alliance partner is weakened, but an already weak state would find itself substantially less secure.

Thus, weaker states should be more willing to defend their alliance partners or join into conflicts originated by alliance partners to prevent the weakening of the alliance's deterrent threat. The deterrent threat sent by an alliance is vital in protecting the weaker state against potential attackers. Thus, this paper will attempt to provide support for two main hypotheses:

1. In cases where an alliance member originates a conflict, a great power or strong state will not necessarily feel compelled to join in the conflict because the state is stable enough that changes in the strength of alliance member do not impact the security of the state.

2. In cases where an alliance member originates a conflict, a weak or medium powered state will be compelled to join in the conflict, even when the conflict may go against the state's desires or the mandate of the alliance because changes in the strength of the alliance member impact the security of the state.

Literature Review

In order to accurately examine the question of why some alliance members are drawn into conflicts while others are not, it is important to understand this question in terms of its position within academic literature and the debates which surround it. The following schools of thought attempt to explain why conflict occurs and why deterrence fails in specific situations. This literature review will focus on three distinct schools of thought; grievance, Rubicon theory, and rational deterrence. Thus, in order to understand deterrence and its effect on defensive alliances, it is necessary to examine these schools of thought in terms of implications for policy and as representations of the decision-making process of the nation-state.

Grievance is a structure-based account of conflict. Collective action occurs, according to this school, when there is relative deprivation of access to the government, human security, or economic opportunities. Thus, conflict occurs because, "Communal groups are jointly motivated by deep-seated grievances about group status and by the situationally determined pursuit of political interests, as formulated by group leaders and political entrepreneurs" (Gurr 1993, 166-167). Groups with a strong communal identity will contribute to conflict due to narratives of grievance based in a sense of injustice created by factors like economic disadvantages, discrimination, and poverty. This model would be inadequate as an explanation of the way that defensive alliances pull alliance partners into conflicts. The "Rebel's Dilemma," as posited by Mark I. Lichbach, argues that grievances are not enough to motivate conflict as there are more costs, in terms of forgone wages, the risk of death, and possible imprisonment than there are benefits to be gained from rebelling or participating in conflict (1994, 387). Thus, it is unlikely that a weak defensive alliance member would be willing to enter into a conflict, even in support of an alliance partner. Weak alliance partners should be unwilling to join into conflict because the conflict would diminish the security of the state. The weak alliance partner would be willing to risk a small loss of security if its partner loses rather than weakening itself substantially by entering into this conflict. Thus, weak states would be unwilling to originate costly conflicts which would only make the state weaker. It is therefore necessary to examine other schools of thought for a more complete theory to explain the decision to engage in a conflict.

Rubicon theory offers another explanation for deterrence failure which may be useful when considering the hypothesis. According to this model, states operate in terms of sequential decision frames which impact their behavior. Initially, states operate under a deliberative mind-set where they

are able to rationally compare options and possible outcomes in order to make the best decision. This stage is characterized by the ability to process new information, weigh costs and benefits, and make rational choices. However, after the decision to act has been made, states enter into an implemental mindset. This shift "can occur either when an actor freely chooses a policy from a menu of options or when a course of action is dictated by an external source," (Johnson and Tierney 2011, 14). In the implemental mindset, the state has become committed to a specific course of action. This means that the state will be less willing to change course or to accept new information. Any new information that is received is generally processed according to the mission of the state, i.e. new information is made to fit the pre-stated goals of the mission. This means that once states have made the decision to act, they become vulnerable to self-serving evaluations which confirm the decisions of the state, rather than presenting evidence in a useful and unbiased manner. States, therefore, become overconfident in their ability to 'win' the conflict. Johnson and Tierney argue that the shift between the deliberative and implemental stages occurs when there is a perception that war is near (2011, 15). One of the potential causes of this perception is that the state feels forced to participate in a conflict because of its alliances. This would explain why states in defensive alliances participate in conflict when alliance members are also involved.

By entering into the alliance contract, the state has in a way already passed into the implemental stage where any conflict involving an alliance member is seen as one in which the state has already agreed to participate. This means that the state should enter into any conflict in which another member of the defensive alliance is involved. While this argument seems to fit the hypothesis, it fails to explain one important intervening variable. According to this school, once the state has crossed the Rubicon of signing the defensive pact, the state should intervene in all conflicts because they perceive that they are bound to their alliance members. However, the hypotheses argue that only weaker states will intervene to protect an alliance member. The Rubicon model cannot take this discrepancy into account.

Yet another school of thought that could explain the reason that other alliance members frequently draw alliance partners into conflicts is rational deterrence. There are three important assumptions that characterize this school: (1) Actors have exogenous given preferences and options; (2) variation in outcomes is explained by different actors' opportunities; and (3) the state acts as a unitary, rational actor (Achen and Snidal 1989, 151). Many scholars in the rational choice school of deterrence argue that in order to prevent an aggressor state from pursuing violent action, the state must prevent a credible threat which makes the cost of engaging in violence outweigh the potential benefits (Achen and Snidal 1989, 157). Further, most authors are in agreement that membership in a defensive alliance, where states band together to increase the credible deterrent threat signal that they can send to potential aggressors, will decrease the likelihood of conflict by increasing the costs associated with a potential attack. Thus, states should enter into conflicts on behalf of their alliance partners only when (1) mandated by the terms of the alliance agreement or (2) when the conflict threatens to substantially decrease the deterrent signal that is being sent by the alliance as a whole. This means that states in defensive alliances should face fewer conflicts or threats of violence from aggressor states.

The rational deterrence model seems as though it would be more accurate than the Rubicon model because it would be able to predict both instances where states would intervene, such as when it would decrease the deterrent signal of the alliance, and when states would not intervene. The Rubi-

con model predicts intervention in all conflicts, which seems overly simplistic. However, while many scholars have argued that states in defensive alliances don't enter into conflict as frequently, few have examined the reasoning behind the decision of defensive alliance members when they do chose to enter certain conflicts. This paper would argue that stronger states are less likely to enter conflicts originated by alliance members because the potential that the alliance member loses would not decrease the deterrent signal as much as if a strong state intervened and lost. Alternatively, a weaker state that is more dependent on the signal that is sent by a defensive alliance would be more likely to enter into a conflict originated by an alliance partner because the diminished credible deterrence signal that would result from a potential loss would have a more substantial impact on the security of the state.

Of the three schools of thought examined here, rational deterrence seems to offer the clearest model for predicting the potential of defensive alliances to entrap weaker alliance members in conflicts that they did not originate more often than stronger alliance members. It is important to note that while these scholars have attempted to explain why deterrence fails and how alliances contribute to deterrence success or failure, there has been little examination of whether the relative strength of the alliance partner contributes to the decision to intervene. While the Rubicon model would predict that states should intervene in any conflict originated by an alliance member, the rational deterrence model would argue that intervention is only will only occur if the alliance partner is relatively weak and depends on the credible deterrent signal sent by the alliance for its security against potential aggressors.

Argument

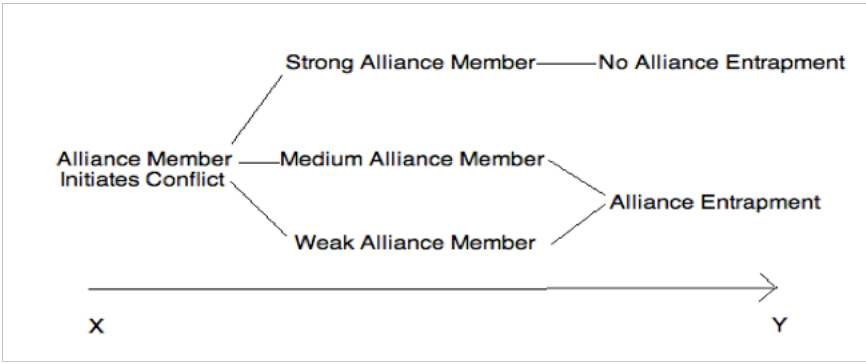
The objective of this paper is to demonstrate that in certain situations, a defensive alliance can result in some states being pulled into conflicts that they would have little strategic interest in pursuing on their own. In order to establish the validity of this argument, it is important to situate it within an intellectual school of thought. I will use rational deterrence theory to explain the reasons why states in defensive alliances may be less secure in some situations than they would be if they were not in a defensive alliance. Rational deterrence will provide a baseline from which I can explore the following hypotheses and determine whether or not they are supported by the data.

Rational deterrence argues that states have exogenous given preferences that are tested against the preferences of other states in order to determine what the outcome in any given conflict or potential conflict would be. This means that states weigh the costs and benefits of initiating conflict before they actually do so. If the costs are higher for an aggressor state than the potential benefits, then there will be no conflict. In addition, a state can signal a deterrent threat to potential aggressor states that demonstrates the costs of a potential attack through higher military spending, political statements, or many other forms of signaling behavior (Achen and Snidal 1989, 151). The logical extension of this argument is that since higher costs mean that aggressor states are less likely to engage in hostile activities, states can and should bind together in alliances so that each can benefit from the power of the other alliance members. If this statement is true, then defensive alliances should act as deterrents to external aggression because each member of the alliance promises to defend every other alliance member if their territorial integrity is threatened. This explanation of rational deterrence as an incentive for building alliances is well established within the literature.

However, this paper argues that there is a codicil to this argument. In order for a defensive alli-

ance to act as an effective deterrent to external aggression, the alliance must be able to pose a credible threat, which will prevent states outside of the alliance from threatening its members. Thus, defensive alliances must present a strong enough deterrent threat to protect even the weakest members of the alliance. This means that the weak or medium powered states within an alliance are particularly invested in maintaining the strength of the deterrent signal sent by the alliance. The deterrent signal that is sent by the alliance is the combination of each state's relative strength and military capability, thus any loss of strength by one alliance member decreases the efficacy of signal sent by the alliance as a whole. Since weaker states depend on this signal to protect the state from potential adversaries, there is an inherent obligation for lower powered states to ensure that the signal remains strong. Conversely, great powers or strong states depend less on the deterrent signal sent by the alliance and more on the military and economic strength of the state itself. Thus, weaker states within a defensive alliance would be drawn into conflicts where the other alliance members are the aggressor because if the alliance member should lose, the credibility of the alliance's deterrent threat would be diminished. Even though the mandate of the defensive alliance does not cover entry into non-defensive conflicts, states involved in defensive alliances could find themselves involved in conflicts originated by weaker alliance members. Figure 1 demonstrates the logic of this argument visually.

Figure 1.



The present study will examine three main variables which will be quantified in detail in the Research Design section of this paper. First, the independent variable is the state's membership in a defensive alliance with a conflict originator. There is also a control variable that will be tested through this paper. Second, the present study will control for whether or not a weak or strong member state originated the conflict. This variable will require a quantification of "low," "medium" or "high" levels of state strength. Finally, the dependent variable is whether the state originated the conflict. Essentially, this describes whether the state started the conflict or merely entered the conflict after it was initiated. Since each data entry represents a state participant in a conflict, each state included in the study was involved as either an originator or a joiner. This allows the study to determine which states within a defensive alliance are more likely to join a conflict which has already been initiated by an alliance partner. These three variables will help to determine whether or not the hypothesis is supported by historical examples.

If the argument is proven to be valid, the data should show that states with "low" or "medium"

strength are more likely to join in a conflict originated by an alliance member. States with small populations, less military funding, and fewer available troops depend more on their alliance partners to send a credible threat to potential adversaries, so it is more likely that these states will act to prevent other alliance partners from losing strength as a result of entry into a conflict. In order for the alliance to send a valid deterrent signal, each state within the alliance must maintain a certain level of strength. Thus, states of low or medium power will be unwilling to risk the potential for a partner to lose and decrease the value of the alliance's deterrent signal. However, state of high power or great powers are less reliant on their alliance partner's strength to protect them from potential adversaries. These states have large militaries and are able to spend large amounts of money on military purchases. This means that the military in each of these states is capable of sending a deterrent signal that is not dependent on the strength of alliance partners. Therefore, great powers are less tied to their alliance partners and rely on them less to bolster their own strength. According to this logic, the data ought to demonstrate that low and medium powers are more likely to join into a conflict originated by an alliance member, where high power states are able to behave more independently.

However, if the evidence demonstrates that alliance members are equally likely to enter into a conflict originated by another alliance member, whether weak or strong, then the argument would not be supported. This evidence would contribute to the validity of the Rubicon theory because it argues that once a state has entered into a defensive alliance, it has crossed a Rubicon, having committed to helping the alliance member regardless of the situation. So, the state would participate in any conflict originated by any alliance partner, regardless of its relative strength or weakness. Alternatively, should the data demonstrate that few or none of the weaker defensive alliance partners joined in a conflict originated by an alliance member, then that could be seen as support for the grievance model. The weaker state knew that the cost of conflict would be too high, so it would be unwilling to enter into a conflict that is technically outside of the scope of the alliance at the risk of diminishing its own security.

This research will add to the academic debates about defensive alliances by examining a variable which has been understudied in the literature to date. The idea that state strength is an intervening variable that determines whether a state will join when a defensive alliance member originates a conflict is one that has not been tested. Additionally, this research could have several important implications for policy-making. Should the hypothesis be supported, it would perhaps indicate that entering into a conflict with weaker states is not necessarily in the best interest of the state because weaker states would be more likely to band together in support of an alliance partner. Previously, states have used defensive alliances to protect weaker states, but if the hypothesis were true, then entering into these alliances would actually decrease the security of the weaker state because they would be increasingly drawn into conflicts originated by alliance partners. Thus, weak states would be much less willing to enter into defensive alliances in the future.

Research Design

In order to test the claims made in the hypothesis, three datasets from the Correlates of War Project will be used to operationalize the three main variables examined in this paper. The dependent variable in this examination is whether or not a state originated a conflict. The Correlates of War Project's Militarized Interstate Dispute (MID) dataset was used to determine which states originated

a conflict versus merely participating or joining (Ghosn 2004). This dataset contains one entry per participant in each conflict for any given set of years. In order to make the dataset more manageable, this study was limited to cases in the most recent five-year period available, 1995 to 2000. While this study will only cover a period of five years, the methods of statistical analysis will still be appropriate because of the large number of cases, which number 535. It is true that there are many events outside of this timeframe that would prove interesting to examine in light of the hypotheses, but the nature of this paper meant that a larger statistical analysis was not possible within the time allotted. In addition, the decision to utilize the most recent five year period was in an effort to avoid selection bias. Rather than choosing a period of time with heavy NATO activity, like the period of the Cold War, utilizing the most recent time period available meant that I was not able to skew the results by picking a specific timeframe that would conform to the hypothesis. This variable was coded as a nominal variable where states that originated the conflict had a value of 1 and states that did not originate the conflict had a value of 0.

The independent variable in this study is whether or not a state is in a defensive alliance with a conflict originator. Membership is defined as having a signed treaty with one or more other nations, which obligates the state to defend its alliance partners should they be attacked by states outside of the alliance. The Formal Alliances dataset compiled for the Correlates of War database was used to operationalize this variable (Gibler 2004). This dataset provides a list of defensive alliances in the form of a dyadic list of states in an alliance with an entry for each year. Thus, each entry in the MID dataset was examined to determine which states were in an alliance with an originator in the year of the conflict. A variable was created for each of the 535 cases that described whether the state was in a defensive alliance with the originator of that specific conflict when it began. Of course, this means that the state that originated the conflict is also often included as an alliance member since in many situations, there were multiple originators in an alliance with each other. Obviously, there are other factors than alliance membership which determine whether a state will enter into a conflict. However, the goal of this paper is to determine whether a state's alliance membership is statistically significant to their decision to enter into a given conflict.

Finally, state strength is operationalized using the National Material Capabilities dataset from Correlates of War (Singer 1987). In order to gain a more complex view of state strength, the Composite Index of National Capability (CINC) scores were used. This score is a combination of six different variables that influence state strength: iron and steel production, military expenditure, military personnel, energy consumption, total population, and urban population. These factors are by no means exhaustive and there are other factors that could influence state strength. However, this operationalization is defended by the Correlates of War Database, which is well respected in the field of international relations and does include some non-military factors, including energy consumption, total population, and urban population. This makes the operationalization of state strength fairly inclusive. The present study defines weak states as those with low numbers in each of these categories (Singer 1987, 115). Conversely, strong states would have high levels of these different factors. Since rational deterrence requires a state to send a signal of strength to other states, the definition of weak and strong is based on factors which would increase the cost of attack to an aggressor state like the strength of the military, i.e. factors that demonstrate the relative credibility of the state's deterrent threat. This control variable was organized into an ordinal level variable with three different catego-

ries: low, medium, and high. In order to determine the cut-off points for each of these categories, a histogram of the data was examined (Appendix 1). States characterized as having low state strength had CINC scores of less than .004, medium states had scores of .004-.016, and high states had scores of higher than .016. The histogram of cases clearly demonstrates a distinct group of high power states that is separate from the medium and low states, so it is clear that states within that group should be considered as high-powered states. However, it was more difficult to distinguish the medium powers from low. Ultimately, I coded the lowest two groups on the histogram, 269 cases, as weak powers and those between the strong and weak groups as medium. While this differentiation may seem somewhat arbitrary, separating the cases using these numbers allowed for a roughly equal distribution of states between medium and high, with a slightly larger base of weak states. In addition, separating the cases based in these criteria would seem to provide an accurate representation of state strength around the world. There are more weak states than medium states and more medium states than strong states. Thus, it seemed that separating the variables according to these numbers would provide the best statistical observations. These distinctions should allow for meaningful statistical observations about each of the three groups.

This study will utilize the data gathered from the Correlates of War Project's database to perform a quantitative analysis of 535 cases of states entering into conflict from the period of 1995 to 2000. The independent variable for this study is whether the state is in an alliance with the originator of the conflict. The dependent variable is whether the state originated the conflict or not. Both the dependent and independent variables are nominal level variables. The control variable is state strength, which has been broken into three discrete categories, making it an ordinal level variable because the responses can be ordered into a scale. Since both the independent and dependent variables are nominal, three chi-square tests with proportional reduction of error measures will be utilized to analyze the data. These tests will determine whether alliance membership makes a difference in the decision of a state that did not originate a conflict to enter into conflict. The proportional reduction of error measures will demonstrate the strength of the relationship, if it exists. This analysis will make it possible to determine what effect defensive alliance membership has on the decision to enter a conflict.

Analysis

The first step in determining whether the two hypotheses are supported by the data is to determine whether alliance membership has any impact on whether a state enters into a conflict that they did not initiate. Thus, it is necessary to run a chi-square test to determine whether the null hypothesis can be rejected. In this case, the null hypothesis would be that alliance membership with a conflict originator has no impact on the decision of a state to enter into a conflict. If, however, the chi-square test results in statistically significant findings, then it is possible to say that alliance membership does have some impact on the decision of a state to enter into a conflict.

Three chi-square tests were run to determine significance; one for low powered states, one for medium powered states, and one for high powered states. Statistically speaking, a p-value that is less than .05 is generally considered to be a significant result. For the low powered states, the p-value was .000, which indicates that the null hypothesis is not accurate in the case of these states. The chi-square test of the medium powered states resulted in a p-value of .012, which is also a significant result. Finally, the p-value of the chi-square test for high powered states was .255 (Appendix 2). This

result is not statistically significant. These results are particularly interesting because they would seem to confirm both of the hypotheses put forward in this paper. The low and medium powered states entered into conflicts that they did not initiate based on whether or not they were in an alliance with the conflict originator. However, the test of the high powered states resulted in a statistically insignificant result, which means that in this case, the null hypothesis is supported. The high powered states did not enter into conflicts based on their alliance partnerships with conflict originators.

While this would seem to support the hypotheses on face value, it is also important to examine the proportional reduction of error (PRE) measurement to determine the strength of the association. The Cramer's V statistic gives us a measure of the strength of the association between the two variables for each of the separate groups. For the low powered states group, the Cramer's V was .403, or a strong association. This means that knowing if a state is in an alliance with a conflict originator allows a 40.3% more accurate prediction of whether the state will have entered into a conflict. For the medium powered states group, the Cramer's V was .213, or a moderately strong association. This means that knowing the alliance status of a state increases our prediction power by 21.3%. Since the test for the high powered states group returned results indicating there was no association between the two variables, it is meaningless to measure the strength of the association with the Cramer's V test. The PRE measure indicates that for both the low and medium powered states, there is a strong association between the two variables being examined.

The directionality of the relationship between membership in an alliance with an originator and originating a conflict is also vital in determining whether the hypotheses have been supported. In order to do this, it is important to examine the percentages of cases where a state that did not initiate a conflict was in an alliance with the originator and joined the conflict. For the groups with statistically significant results, low and medium powered states, it is possible to examine the breakdown of cases to determine the directionality of the results. For low powered states, 38.2% of states that were in an alliance with a conflict originator were not originators of a conflict. This is compared to the 6% of states not in an alliance with the originators that did not originate a conflict (Appendix 3). Thus, it is more likely that weak states will join in a conflict that they did not originate when they are in an alliance with the initiator. Medium powered states had a similar breakdown. For these states, 26.5% of alliance members were not originators of the conflict, where 9.4% of non-alliance members did not originate the conflict. Given the significance of the statistical testing, it is clear that medium and low powered states that did not originate a conflict were more likely to join the conflict if they were in an alliance with an originator. However, it is not possible to make the same claims for high powered states, as the p-value was insignificant.

These results would generally support the two hypotheses. The low and medium powered states are statistically more likely to enter into a conflict originated by an alliance partner than they would be if they were not in an alliance with an originator. In addition, the low states have a stronger association than the medium states. This seems to support the logic that the weaker a state is, the more likely they are to act to prevent a loss of strength from an alliance partner and therefore preserve the credibility of the alliance's deterrent threat. However, there was not a statistically significant association between alliance membership and originating a conflict for the high powered states. This would indicate that for high powered states, alliance membership with a conflict originator has no impact on the decision of a state to enter into a conflict. This data would seem to directly support the hypothesis

that strong states or great powers do not intervene in conflicts based on their alliance membership because they are less concerned about a potential reduction in the strength of their alliance partners.

Conclusion

This paper has attempted to demonstrate the importance of state strength in determining alliance behavior. Rational deterrence theorists have long argued that each state within the international system makes decisions based on a rational cost-benefit analysis that aims to maximize the marginal utility of the state's decision to act. Therefore, states can prevent potential aggressors from attacking by increasing the cost of attacking and potentially losing in comparison to the potential benefits of expanded territory or wealth. Following this logic, defensive alliances should increase the security of the state because they allow states to pool resources and send a stronger deterrent signal to potential adversaries than they would be able to alone. This argument has been well documented in the literature on rational deterrence. However, this paper attempts to add a corollary to this argument. Since the strength of the defensive alliance depends on the strength of all of its alliance members, any loss of strength for an alliance member represents a decrease in the credibility of the deterrent signal sent to other states. For strong states or great powers, this is not of great concern. Even without the backing of the alliance, the strong military capacity of these states allows them to deter potential attackers. However, weak or medium powers depend more strongly on the alliance as a deterrent to aggressors. Any decrease in the power of an alliance partner decreases the security of the state itself. This means that weak or medium powers are more invested in maintaining the strength of an alliance and will therefore intervene in conflicts that they did not originate in order to ensure that their alliance members do not lose.

This argument has been supported by the data gathered from the Correlates of War Project. The data showed that for both weak and medium powered states, alliance membership with a conflict originator had a significant impact on the decision of the state to enter into a conflict that it did not initiate. However, the same level of significance was not found for high-powered states. Thus, the first hypothesis, that a great power or strong state will not necessarily feel compelled to join in conflicts initiated by alliance partners because the state is stable enough that changes in the strength of alliance member do not impact the security of the state, has been supported by this study. The second hypothesis, that a weak or medium power state will be compelled to join in conflicts initiated by alliance partners, even when the conflict may go against the state's desires or the mandate of the alliance has also been supported by the data. This indicates that the explanation of alliance behavior backed by the logic of rational deterrence is more accurate than the explanations provided by the grievance model, which predicts that this joining behavior would not occur across all three groups, or the Rubicon model, which predicts that it would occur uniformly across the groups.

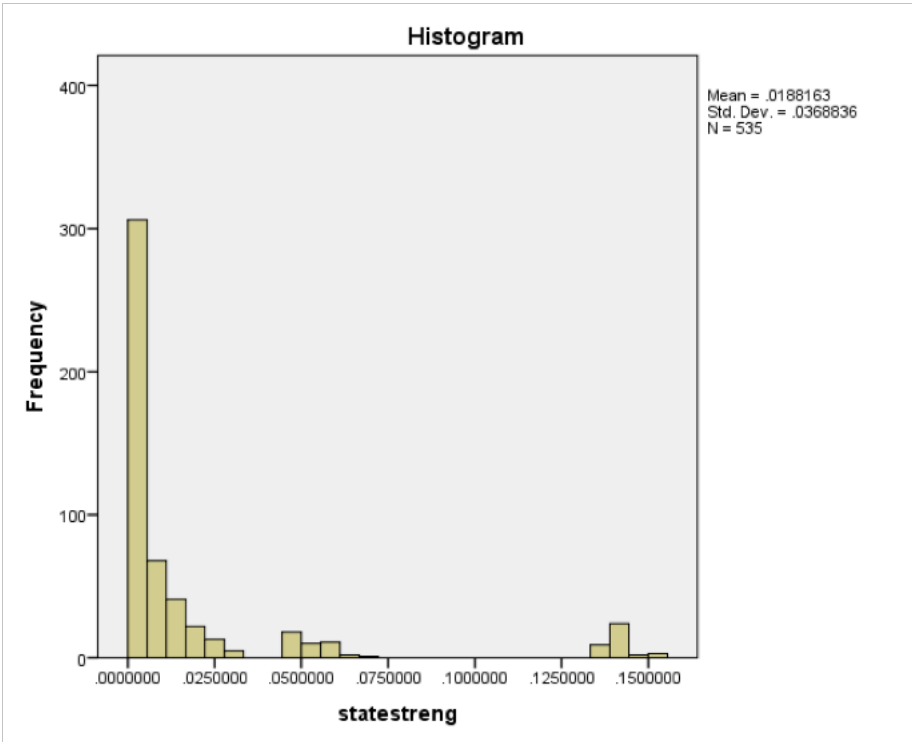
However, there were some challenges associated with this study that may have an impact on the results. Due to time constraints, the tests of the hypotheses were only carried out on conflicts occurring within a five-year period. More accurate results might be obtained with further study and an expansion of the dataset to include more cases. In addition, it was impossible to include data for each of the states that were in an alliance with an originator but did not decide to enter into the conflict. The dataset that this study was based on differentiated originators from joiners in conflicts, but did not identify states that did not participate in the conflict at all. It is fairly easy to understand why

this would be the case. The number of cases would expand exponentially if every single state were included for each conflict record. However, this means that the data used for this study cannot take into account the decision of states not to join and can only test whether the state is more likely to join when they are in an alliance with the originator or not. A more comprehensive study would have to include states in an alliance with an originator that decided not to join at all.

Despite these drawbacks, the findings of this study allow for an interesting discussion of deterrence and behavior within alliances. Deterrence is supposed to prevent conflict by allowing states to signal the potential costs of an attack to an aggressor. Defensive alliances are supposed to give states a larger base of power with which to warn a potential aggressor. However, if states view the power of each state within an alliance as vital to their ability to send a credible signal, then states may engage in behavior that actually makes them more conflict prone than they would be without the alliance. Since it is clear that low and medium strength states are more likely to enter into conflicts that alliance partners originate than states that are not in a conflict, the result is that weaker states are involved in more conflicts than strong states. Ironically, their involvement in these conflicts most likely contributes to their weakness in terms of military strength. Thus, it would seem that weaker states would be more secure if they were not in defensive alliances at all.

In addition, these findings have broad implications for future United States policy and the understanding of deterrence as a whole. This paper began with a puzzle. The United States intervened in Libya seemingly solely at the behest of its alliance partners, but refused to intervene in Rwanda, despite pressure from some of those same partners. The findings of this paper are able to explain this conundrum. Strong states or great powers like the United States decide to enter into conflict based on factors other than alliance pressure or the potential of an alliance member to weaken the alliance by 'losing' a conflict that they initiated. This means that the United States should not be concerned that defensive alliance partners will always be able to force the United States into action. Defensive alliances still act to increase the security of the United States overall because they allow access to additional support or resources. These alliances are statistically unlikely to force the US into any conflict that it does not wish to be involved in, despite recent events. It also means that the United States should be cautious when intervening in weak or medium strength states that have defensive alliance partners. These partners are forced to view any potential loss of strength as a threat and will act to maintain their security by joining in to any conflict in which alliance partners are involved.

Appendix 1: Histogram of State Strength



Appendix 2: Chi-Square Test Results

State Strength	X2	P-Value	Cramer's V
Low	43.604	.000	.403
Medium	6.370	.012	.213
High	1.296	.255	-
Total	41.710	.000	.279

Appendix 3: Contingency Table

Are they in an alliance with initiator * Did they originate the conflict * statestrength3 Crosstabulation

statestrength3				Did they originate the conflict		Total
				No	Yes	
Low	Are they in an alliance with initiator	No Alliance	Count	12	189	201
			% within Are they in an alliance with initiator	6.0%	94.0%	100.0%
		Alliance	Count	26	42	68
			% within Are they in an alliance with initiator	38.2%	61.8%	100.0%
	Total		Count	38	231	269
			% within Are they in an alliance with initiator	14.1%	85.9%	100.0%
Medium	Are they in an alliance with initiator	No Alliance	Count	10	96	106
			% within Are they in an alliance with initiator	9.4%	90.6%	100.0%
		Alliance	Count	9	25	34
			% within Are they in an alliance with initiator	26.5%	73.5%	100.0%
	Total		Count	19	121	140
			% within Are they in an alliance with initiator	13.6%	86.4%	100.0%
High	Are they in an alliance with initiator	No Alliance	Count	12	77	89
			% within Are they in an alliance with initiator	13.5%	86.5%	100.0%
		Alliance	Count	8	29	37
			% within Are they in an alliance with initiator	21.6%	78.4%	100.0%
	Total		Count	20	106	126
			% within Are they in an alliance with initiator	15.9%	84.1%	100.0%
Total	Are they in an alliance with initiator	No Alliance	Count	34	362	396
			% within Are they in an alliance with initiator	8.6%	91.4%	100.0%
		Alliance	Count	43	96	139
			% within Are they in an alliance with initiator	30.9%	69.1%	100.0%
	Total		Count	77	458	535
			% within Are they in an alliance with initiator	14.4%	85.6%	100.0%

Bibliography

Achen, Christopher H. and Duncan Snidal. "Rational Deterrence Theory and Comparative Case Studies." World Politics. Vol. 41, No. 2. (1989), p. 143-169.

Chen, H. C., and W. S. Neilson. "The Reliability of Alliances and Extended Deterrence: A Game-Theoretical Analysis." Issues & Studies 43, no. 2 (2007): 1-37.

Corbetta, R. "Determinants of Third Parties' Intervention and Alignment Choices in Ongoing Conflicts, 1946-2001." Foreign Policy Analysis 6, no. 1 (2010): 61-85.

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

Gibler, Douglas M., and Meredith Sarkees. 2004. "Measuring Alliances: The Correlates of War Formal Interstate Alliance Data set, 1816-2000." Journal of Peace Research 41(2): 211-222.

Gurr, Ted Robert. "Why Minorities Rebel: A Global Analysis of Communal Mobilization and Conflict Since 1945" International Political Science Review. Vol. 14, No. 2 (April 1993), p. 161-201.

Johnson, Dominic D.P. and Dominic Tierney. "The Rubicon Theory of War: How the Path to Conflict Reaches the Point of No Return." International Security Vol. 36, no. 1 (2011): 7 40.

Johnson, J. C., and B. A. Leeds. "Defense Pacts: A Prescription for Peace?" Foreign Policy Analysis 7, no. 1 (2011): 45-65.

Lichbach, Mark I. ""What Makes Rational Peasants Revolutionary?: Dilemma, Paradox, and, Irony in Peasant Collective Action." World Politics Vol. 43, no. 3 (1994): 383-418.

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

Singer, J. David. (1987). "Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816-1985" International Interactions, 14: 115-32.

Taha, Hagar. The Failure to Protect, Again: A Comparative Study of International and Regional Reactions Towards Humanitarian Disasters in Rwanda and Darfur. Saarbrücken, Germany: Lambert Academic Publishing, 2011.

United Nations Security Council. "Security Council Approves 'No-Fly Zone' over Libya, Authorizing 'All Necessary Measures' to Protect Civilians." SC/10200. 2011. http://www.un.org/News/Press/docs/2011/sc10200.doc.htm

A VOTE OF NO (SELF)-CONFIDENCE: GENDER, SOCIALIZATION, AND POLITICAL AMBITION AMONG STUDENTS

Allison Dunatchik

Abstract

In light of women's underrepresentation in student government, this paper investigates to what extent levels of political ambition differ between male and female students and why at American University. Current literature regarding women's underrepresentation in elected office suggests that gender differences in levels of political ambition in political pipeline careers explain much of women's lower likelihood to run for and serve in elected office. This body of scholarship finds that women's political ambition is significantly diminished by traditional sex-role socialization and traditional views of the political realm. Because research shows that participation in student government and political activities, such as volunteering for a campaign, in young adulthood significantly increases high-level civic participation later in life, this study fills a gap in current research by analyzing the impact of socialization and traditional views on levels of students' political ambition at American University.

Introduction

According to the American University website, the Princeton Review named American University (AU) the nation's second most politically active campus in 2012; 72 percent of students report that "keeping up-to-date with political affairs" is important to them. The university boasts impressive reputations for its School of International Service and School of Public Affairs. It also reports that women make up roughly 59 percent of the student body. Yet female students occupied only 10 out of 32 elected student government positions in the 2011-2012 academic year, and only 13 of the 47 candidates running for office in 2011 were women. These numbers are strikingly similar to the 17 percent of women in the U.S. Congress and the 12 percent of female governors in the United States (CAWP 2012).

The dearth of female students in student government at American University, despite their overrepresentation in the overall population, suggests significant gender differences in political ambition, or the desire and intent to run for political office. Based on the results of a survey of AU students, this research provides empirical evidence of the gender gap in political ambition and sheds light on the reasons it exists. I find that while sex does not always directly predict political ambition among students, significantly gendered differences exist within other factors that more directly predict ambition. Women's political ambition is substantially depressed by lowered self-assessments of their qualifications to serve in office, and a less politicized upbringing.

Determining the factors at work in hindering political ambition in female students at American University is important for several reasons. First, the fact that women are much less likely to run for office even at the college level indicates that a number of factors political scientists often propose to

explain women's underrepresentation in elective office are insufficient. Because issues like fundraising capabilities, sexist media coverage, and family responsibilities are not applicable in studies of student government, the persistent dearth of women running for and serving in student government suggests that other factors are at work.

The underrepresentation of women in student government and political office may indicate that women, in general, perceive leadership as either unappealing or unattainable. In light of the fact that the extent to which citizens feel they could make a successful run for elective office is an indicator of a democracy's political legitimacy, gender differences in political ambition are a significant problem. By translating Lawless and Fox's (2005; 2010) work to the college level, this study seeks to add to the pool of scholarship dedicated to gender and political ambition by reaching respondents while they are in early phases of formulating ambition and views of elected office.

Conceptual Framework

Political ambition is central to the study of political science because of its relationship to democratic governance and political legitimacy. The degree to which citizens are willing to participate in politics or run for public office is a key measure in assessing the legitimacy of democracy in the United States (Fox and Lawless 2010; 2005). Further, as Thomas (1998) argues, "A government that is democratically organized cannot be truly legitimate if all its citizens . . . do not have a potential interest in and opportunity for serving their community and nation" (see also Mansbridge 1999; Verba, Schlozman and Brady 1995). If interest in seeking office is restricted to citizens with certain demographic profiles, then serious questions emerge regarding both descriptive and substantive representation (Lawless and Fox 2010; 2005).

In this study, I develop and examine early political ambition, or potential interest in office seeking, a type of ambition that precedes the actual decision to enter a specific political contest. Research finds that political ambition in students and participation in activities like student government greatly increase an individual's likelihood of running for office later in life (Glanville 1999). For this reason, this study is tailored to analyze political ambition with regard to both public office and student government.

Literature Review

Existing Explanations: Discrimination, the Pipeline, the Institution, and Family

Throughout the 1970s and 1980s, most political scientists explained the lack of women in politics as a result of gender-based discrimination. In other words, that the American electorate did not support women candidates (Boxer 1994; Kirkpatrick 1974). Survey data from those decades reveal that, indeed, the vast majority of the American electorate believed that men were better suited emotionally for politics (Lawless and Fox 2004, Fig. 2.2). In 1992, however, the so-called "Year of the Woman," the significant increase in the number of women running for and elected to political office substantially discredited the "discrimination explanation" (Dolan 1998). A number of studies demonstrating that women's electoral success rates are comparable to men's (Dolan 1998) and polling data showing that 90 percent of Americans would be willing to vote for a female presidential candidate (Frankovic 2008) elicit further skepticism over the extent to which the underrepresentation of women in elected office can be attributed to discrimination in the electorate.

While scholars in the field have, by and large, rejected the "discrimination explanation," they have turned to a number of institutional explanations in its place. One such explanation contends that women are underrepresented in elective office because they are underrepresented in the careers that typically lead to running for office – law, business, and education. Darcy, Welch and Clark (1994) contend that women are typically relegated to "pink ghetto" occupations, such as clerical work, nursing, and teaching at the elementary school level – occupations that do not generally lead to running for office. This explanation implies that as women become more numerous in so-called pipeline careers, their numbers will also increase in elective office. Women have made significant progress in the workforce in recent decades. Despite this progress, however, women are still significantly underrepresented in the top tiers of law, academic and business careers (Lawless and Fox 2005).

The incumbency advantage also hinders women's capacity to make substantial gains in representation (Darcy, Welch and Clark 1994). The vast majority of incumbents seek reelection. Among those who do seek reelection, success rates top 90 percent (Darcy, Welch and Clark 1994). Because men make up the majority of incumbents, the political opportunities for potential women candidates are limited to open seat elections and weak incumbents (Lawless and Fox 2005).

In addition to these institutional barriers to entry, social scientists point a number of social barriers to explain women's underrepresentation in elected office. One of such explanation holds that because women are still primarily responsible for the bulk of household and child care tasks, they find the prospect of running for and serving in political office less feasible than do men, who are typically unencumbered by such obligations (Lawless and Fox 2010). Despite the increase in two-income households in recent decades, and the slackening of rigid sex roles, a number of surveys continue to find that women spend twice as many hours as men on household and child care tasks (Lawless and Fox 2010). While this explanation likely plays some role in women's desire and ability to run for and serve in political office, the extent to which the correlation exists is unclear (Lawless and Fox 2005, 59). Lawless and Fox (2005, 73) find considerable qualitative evidence to support the notion that women's duties as primary caretakers of the household significantly constrict their capacity to seriously consider running for office, pointing out that women continue to be "forced to reconcile their careers and families" in a way that men are not. However, that qualitative evidence is complicated by the fact that their quantitative analysis finds that family roles and responsibilities do not significantly predict whether an individual considers running for office (Lawless and Fox 2005, 67).

A New Take: Exploring Gender Differences in Political Ambition

Finding these explanations insufficient in light of the growing evidence against them, Lawless and Fox (2010; 2005) develop the "political ambition" explanation, which argues that women's underrepresentation in politics persists because they do not run for office as often as men. Taking into consideration Darcy, Welch and Clark's eligibility pool explanation, Lawless and Fox sample men and women from the eligibility pool – lawyers, business executives, educators, and political activists – and find that women are less likely than similarly situated men to consider running for office. They attribute the gender gap in political ambition to three manifestations of traditional gender socialization.

First, notions of traditional family roles impress upon both women and men the expectation that women should bear the responsibility for a majority of household and child-raising tasks. Myriad empirical studies continue to find that married women in two-career households continue to perform 60-70 percent of household tasks (Achen and Stafford 2005; Bittman and Wacjman 2000). Because

women have an additional expectation to fulfill family responsibilities, many women find balancing careers with home life challenging, and perceive the idea of running for office as an unappealing "third job" (Lawless and Fox 2005). Because men do not experience family responsibility expectations to the same extent women do, entering politics does not impose on their capacity to fulfill their personal and professional obligations.

Second, because existing governmental institutions were created by men and are controlled by men, they embody and perpetuate an "ethos of masculinity" that applauds and rewards displays of masculinity, stymieing the integration of women into politics (Lawless and Fox 2005, 9). For example, Lawless and Fox (2005, 9) point out that when individuals consider the prospect of running for office, "they must rely on the support of numerous political institutions" – most which are dominated by men. Lawless and Fox (2010; 2005) find that receiving encouragement to run for office from actors within these institutions is the most significant predictor of seriously considering running for office. They determine that while both men and women are much more likely to run for office when they are recruited, in reality, women are much less likely to be recruited.

Third, a "gendered psyche" where women overlook their marginalization in the public sphere in favor of a patriarchal system that makes many women feel protected and valued in their traditional roles makes politics a suitable career for men, but one that "does not even appear on the radar screen for many women" (Lawless and Fox 2005, 10-11). Gendered socialization leads men and women to gravitate toward traditionally male and female occupations. A number of studies on gender socialization find that women tend not to be socialized to develop many of the traits that are admired and rewarded in politics, such as confidence, assertiveness, and self-promotion. Lawless and Fox's (2010; 2005) study finds that women are much more likely to doubt and understate their qualifications to serve in elected office, providing compelling empirical evidence of these tendencies.

Although Lawless and Fox provide an excellent investigation into early political ambition and the early political socialization factors that contribute to ambition, because their study focuses on men and women who are already established in careers within the political pipeline, they are not able to examine the gender dynamics of political ambition among adolescents and young adults. In their concluding chapter, Lawless and Fox (2005, 154) reiterate the importance of political socialization in the development of political ambition, remarking, "For most people, choosing to run for office is not a spontaneous decision; rather, it is the culmination of a long, personal evolution that often stretches back into early family life." They point out that "Women's greater sense of self-doubt pertaining to their abilities to enter the political arena is one of the most complex barriers to their emergence as candidates," and calls for researchers to "explore the origins of these doubts…that affect whether and how women and men come to view themselves as candidates" (Lawless and Fox 2005, 154).

Few studies have attempted to answer that call. In one such study, Smith (2007) finds a number of similarities among the concerns of men and women regarding running for political office. She finds that a greater concern for self-presentational issues (which she defines as their level of comfort in subjecting themselves to public scrutiny) relative to logistical issues (those concerning the actual act of running a campaign) makes women and men less likely to be ambitious and that women and men benefit from encouragement to consider running for office. Smith concludes, however, that self-presentation and impression management issues rank higher as obstacles for young women than for young men. Moreover, men and women differ in their perception of impression management

obstacles to running for office. While this study provides useful insight into young women's concerns about running for office, Smith does not include a student government component. Because, for most young women, the potential decision to run for office is years and likely decades down the road, it is important to include an element of closer temporal proximity.

Miller and Kraus (2004) provide one of the few existing studies of gender division in student government participation. They find that although women hold nearly half (48 percent on average) of student government positions, the majority of student government leaders (71 percent of the student government presidents and vice presidents) are men. But this study does not adequately address the reasons behind this underrepresentation. In addition, there are serious flaws with this study, the most predominant being its lack of scholarly foundation and its failure to offer compelling justification for their research in the first place.

A growing body of research finds that, indeed, there is justification in studying political participation and involvement in activities like student government at a young age. A number of studies show that participating in certain activities during adolescence and early adulthood leads to increased levels political participation. Glanville (1999) finds, for example, that even controlling for personality traits and political attitudes, participation in extra curricular activities plays a role in developing political involvement. In particular, participation in student government correlates to increased civic participation. Although this study does not attempt to find a direct correlation between participation in extra-curricular activities and running for office, it stands to reason that the increased civic engagement that results involvement in student government could lead to political ambition and the decision to run for office in adulthood.

Hypotheses

Current research on gender dynamics of political ambition indicates that sex-role socialization (how individuals are socialized with regard to traditional gender roles) and gender discrepancies in self-evaluation (how individuals perceive and asses their own abilities) significantly influence levels of political ambition, or the desire to run for political office, among men and women (Glanville 1999; Lawless and Fox 2005; Smith 2007). Research finds that individuals who ascribe to traditional sex-role orientations are more likely to perceive politics as a realm inappropriate for women, and to find women less emotionally suitable to serve in political office (Lawless and Fox 2005). Research also shows that women tend to be more critical of their qualifications than similarly situated men in considering running for office (Lawless and Fox 2005; Smith 2007). Based on these findings, I expect to find that:

1. Men have higher levels of political ambition than women with regard to both running for student government and running for political office in the future;

2. Self-assessment of qualifications and adherence to traditional gender roles are factors at work in explaining male and female students' levels of political ambition.[1]

Study Design

Drawing inspiration from Lawless and Fox's (2010; 2005) Citizen Political Ambition Study, I created a survey (see Appendix A) consisting of 35 questions designed to shed light upon the nature

1 See Appendix B for a full explanation of variables used in this study.

of political ambition among students at American University, as well as the factors that impact their level of ambition. The survey was designed and administered through the online survey tool, Survey Monkey.

The data collection period spanned for approximately one month. The survey was advertised via the social networking tool, Facebook, Today@AU (an online university newsletter delivered to all American University students), and posters throughout campus. A random sample of AU students was invited through Facebook to participate in the survey. The Today@AU advertisement was distributed to the entire AU community, and contained the disclaimer that survey participants must be undergraduate students at AU. Finally, posters were hung on bulletin boards throughout campus, advertising the study, emphasizing that only undergraduate students may participate. As a device to attract student participation in my survey, all advertisements emphasized that students participating in the study would be entered into a drawing to win one of several prizes. After the month-long data collection process, I compiled survey answers from Survey Monkey and transformed responses into a workable data set, coded numerically to facilitate the application of statistical analysis.

Studying political ambition at a young age provides a unique look at political ambition because many of the traditionally accepted barriers to entry inhibiting the number of women in elected office do not apply. Social barriers like family obligations and household duties should not be much of a concern, nor should institutional barriers like incumbency or a lower capacity to fundraise since students must run every year, are rarely allowed to run more than four years, and campaigns generally last only one to three weeks and are capped at a modest budget. Concern over gender bias in the media is also negligable as student candidates are not likely to receive much coverage, even from their university media. Studying political ambition among college students, I am able to control for many of the traditionally cited reasons preventing women from reaching gender parity in elected office.

This methodological approach has a few potential problems to address, the first of which are selection and response bias. Because this survey is entirely voluntary, respondents who completed the survey may have agreed to participate because of a vested interest in politics and women's political leadership, resulting in an understatement of any gendered findings that emerge. In addition, students may not have accurately conceptualized the prospect of a run for political office, since any potential run would likely take place well into the future. This study is geared to address ambition to run for both public office and student government in an attempt to account for this possibility. It is worthwhile, nevertheless, to analyze students' perceptions of their access to public office as an indicator of the status women in American politics and of democracy in the U.S.

Results

Gender, Political Ambition and Student Government

The data supports both of my hypotheses - however, in a more nuanced way than anticipated. In a number of the regression tests performed, sex itself as a variable is not a significant predictor of political ambition. Looking deeper into the data, however, I find that many significant predictors of ambition are, in fact, gendered. Bivariate analyses of these variables reveal that while women may not necessarily be more likely to be less ambitious to begin with, they are often substantially disadvantaged in the significant predictors of ambition. Consistent with previous research and as I predicted in Hypothesis 2, both self-assessments of qualifications to serve in office and traditional views of

gender roles emerge as factors depressing women's political ambition – although self-assessments of qualifications have a far greater impact on ambition than view of gender roles as most women do reject traditional conceptions of gender roles. Early political socialization also proves a significant factor leading to lowered levels of political ambition among women.

My multiple regression and bivariate analysis results are organized into four sections. The first two sections pertain to ambition to run for student government, while the last two explore ambition to serve in political office in the future. Section 1 predicts interest in running for student government while Section 2 explores the factors that predict a respondent's self assessments of their qualifications to serve in student government. Like Section 1, Section 3 investigates the factors that predict interest in running for political office in the future, and Section 4 predicts respondents' self-assessments of a potential future candidacy.

1. Considering Running for Student Government.

Table 1.1

	High Interest in Running for Student Government		No Interest in Running for Student Government	
	Coefficient (and standard error)	Maximum Change in Probability (Percentage Points)	Coefficient (and standard error)	Maximum Change in Probability (Percentage Points)
Baseline Indicators				
Sex	0.255 (.714)	-	-1.29** (.325)	24.6
School of Public Affairs	-2.538* (1.045)	2.7	0.453 (.403)	-
School of International Service	-1.549 ((1.020)	-	0.404 (.381)	-
Kogod School of Business	0.082 (1.041)	-	-0.136 (.443)	-
College of Arts and Sciences	-0.87 (.957)	-	0.429 (.354)	-
School of Communication	-0.427 (1.276)	-	0.351 (.439)	-
Political interest	0.838 * (.391)	19.1	-0.447 (.239)	-
Political participation	0.415 (.222)	-	-0.191 (.102)	-
Political Socialization				
Frequency political discussions with parents	0.265 (.434)	-	-0.12 (.156)	-
Encouragement to run for office growing up	-0.061 (.405)	-	-0.132 (.170)	-
Having parents who ran for political office	-0.6 (.957)	-	-0.336 (.425)	-
Views of Traditional Gender Roles				
Household composition growing up	-0.079 (.183)	-	0.028 (.068)	-
Self-identify as a feminist	0.657(.724)	-	0.302 (.276)	-
Believing men and women are equally suitable for politics	0.142 (.641)	-	-0.65 * (.289)	23.1
Believing that men and women should have equal roles in society	-0.103 (.498)	-	0.319 (.213)	-
Self-Assessments				
Self-assessment of qualifications to serve in student government	2.173 ** (.581)	45.9	-0.265 (.159)	-
Confidence of winning one's first campaign for student government	-0.731 (.501)	-	-0.207 (.195)	-
Encouragement				
Received encouragement to run for student government	0.495 (1.502)	-	-0.52 (.657)	-
Received encouragement to run from a personal source	0.401 (1.265)	-	-0.433 (.603)	-
Received encouragement to run from a professional source	0.187 (.753)	-	-0.204 (.345)	-
Political Efficacy and Legitimacy				
Belief that student government officials are qualified for their positions	0.563 (.630)	-	-1.116 ** (.254)	20.4
Perceptions of the Playing Field				
Expectations of sexism in running for student government	-0.907 (.559)	-	-0.08 (.213)	-
Constant	-9.074 * (3.559)		4.926 ** (1.374)	
Pseudo-R squared	0.193		0.227	
N	369		369	

Notes: Maximum changes in probabilities are based on the logistic regression results. Probabilities were calculated by setting all continuous independent variables to their means and all dummy variables to their modes. The change in probability reflects the independent effect a statistically significant variable exerts as I vary its value from its minimum to its maximum. Significance levels: ** p < .01; * p < .05.

In order to assess the impact of sex, political socialization, views of gender roles, and self-assessment of qualifications to serve in student government on the likelihood of a student considering running for student government, I performed two regression analyses. The first model presented in Table 1.1 predicts whether the respondent indicated that running for student government is "something [he/she] would definitely like to undertake in the future." The second logistic regression equation predicts whether the respondent reported that running for student government is "something [he/she] would absolutely never do." The models control for school affiliation within American University, interest in student government, and attitudes toward the legitimacy and efficacy of student government.

Overall, these models have moderate explanatory value, explaining 19 percent and 23 percent of the dependent variable respectively. As anticipated, positive self-assessment of qualifications to serve in student government significantly increase the likelihood of having high levels of ambition to run for student government. Students who self-assess as very qualified to serve in student government are 45 percent more likely to have high levels of student government ambition than those who do not. Somewhat surprisingly, however, these same self-assessments of qualifications do not significantly depress political ambition.

Also as expected, adherence to traditional conceptions of gender roles increases the likelihood of having low levels of political ambition for both men and women. Respondents who agree with the statement that "Men are better suited emotionally for politics" are 23 percent more likely to have low levels of interest in running for student government ambition. Contrary to expectations, though, respondents who eschew traditional conceptions of gender roles are not significantly more likely to exhibit ambition to run for student government. Bivariate analysis of the relationship between sex and the belief that men and women are equally suitable for politics further demonstrates that women are significantly more likely than men to reject traditional notions of gender roles (81 percent of women compared to 70 percent of men; difference significant at $p < .05$). But these attitudes do not trigger ambition.

Table 1.2

	Percent of Students	
Question: To what extent do you agree with the statement, "men are better suited emotionally for politics than most women"?	Women	Men
Strongly	1.4% *	3.90%
Somewhat	17.8 *	26.2
Not at All	80.8 *	69.9
N	286	103

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

Perhaps the most important finding to emerge from the regression analysis; however, is that, although sex is significant, it operates in the opposite direction than expected. More specifically, men are 26 percent more likely than women to report no interest in running for student government. However, when we turn to whether respondents have taken any concrete steps toward launching a campaign, female students are less likely than male students to have investigated how to get their name on the ballot (11 percent of women and 26 percent of men), or to have discussed running with student government officials (12 percent of women and 18 percent of men), friends and family (25 and

32 percent), or other members of the university community (17 and 20 percent).

Table 1.3

	Percent of Students who Have Taken the Following Steps Toward Running for Student Government	
	Women	Men
Discussed running with SG officials	12.20%	18.30%
Discussed running with family members	24.5	31.7
Discussed running with other members of the school community	16.8	20.2
Investigated how to get their name on the ballot	10.5 **	26
Attended Campaign College	3.1	2.9
N	286	104

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

These findings beg a broader question: if women are as ambitious as men when it comes to student government, and if women are actually more likely to consider the option of running for student government, then why are they consistently underrepresented? What factors hinder women from acting on their ambition, and why don't these factors inhibit men in the same way? As the data presented in Table 1.4 suggest, most men and women feel that they would be more likely to run if they had more free time and if there were issues they felt passionately about. But women would also be significantly more likely to run if a friend encouraged them to do so, or if they had previous campaign experience.

Table 1.4

	Percent of Students who Report that the Following would make them More Likely to Run for Student Government	
	Women	Men
A professor or advisor suggested you run	33.60%	38.50%
A member of SG suggested you run	28.3	33.7
A friend suggested you run	21.2*	11.2 *
You had more free time	50	48.1
There were issues you felt passionate about	61.5	64.4
You knew there was support for your candidacy	46.9	50
You had previous campaign experience	22.4 *	11.5
N	286	104

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

2. Self-Assessments of Qualifications to Serve in Student Government

Students who self-assess as highly qualified to serve in student government are significantly more likely to report high levels of ambition to run for student government. To explain why female

students are continually underrepresented in student government, despite being equally as likely as male students to have high student government ambition and more likely than male students to consider the option of running for student government, I explore the relationship between self-assessments of qualifications and sex. A statistically significant difference can be observed in the crosstabulation of this survey question, as displayed in Table 2.1. While 11 percent of women reported believing themselves to be highly qualified, 34 percent of men believed themselves highly qualified. This gap only widens when looking at whether respondents believe themselves to be qualified or highly qualified to serve in student government. While nearly 40 percent of women believe themselves to be highly qualified or qualified to serve, a full 70 percent of men believe themselves highly qualified or qualified.

Table 2.1

Question: How qualified do you feel you are to hold office in student government	Percent of Students	
	Women	Men
Not qualified	20.7% **	10.60%
Somewhat qualified	39.6 **	20.2
Qualified	28.6 **	35.6
Very Qualified	11.1 **	33.7
N	280	104

Note: Significance levels of Chi-square test comparing women and men: ** $p < .01$; * $p < .05$

I performed two regression tests to explore the factors impacting how respondents self-assess their qualifications to serve in student government. The first model (Table 2.2) predicts whether the respondent indicated that, in assessing their qualifications to serve in student government, they believe themselves to be "very qualified." The second model predicts whether the respondent indicated that they believe themselves to be "not qualified" to serve in student government. Again, these models control for school affiliation within American University, interest in student government, and attitudes toward the legitimacy and efficacy of student government.

These models fare somewhat better than those in the previous section, explaining 26 percent of the dependent variable. The first regression equation reveals that sex is a statistically significant factor in predicting the likelihood of a respondent self-assessing as "very qualified" to serve in student government. All else equal, women are 7 percent less likely than men to believe that they are highly qualified. The second model, however, reveals that sex does not predict self-assessments of "not qualified."

Table 2.2

	Self-Assesses as Highly Qualified		Self-Assesses as Unqualified	
	Coefficient (and standard error)	Maximum Change in Probability (Percentage Points)	Coefficient (and standard error)	Maximum Change in Probability (Percentage Points)
Baseline Indicators				
Sex	-1.111** (.387)	7.0	0.464 (.446)	-
School of Public Affairs	1.82** (.499)	15.9	-1.906* (.799)	1.7
School of International Service	4.6 (.511)	-	-0.913 (.637)	-
Kogod School of Business	-0.061 (.675)	-	-1.468 (.762)	-
College of Arts and Sciences	-0.188 (.473)	-	-0.221 (.587)	-
School of Communication	-2.143 (1.164)	-	-0.304 (.634)	-
Political interest	-0.152 (.266)	-	-0.031 (.439)	-
Political participation	0.319* (.132)	15.4	-0.292 (.172)	-
Political Socialization				
Frequency political discussions with parents	0.187 (.230)	-	-0.16 (.215)	-
Encouragement to run for office growing up	0.081 (.221)	-	-0.748** (.286)	12.7
Having parents who ran for political office	-0.568 (.668)	-	0.112 (.611)	-
Views of Traditional Gender Roles				
Household composition growing up	-0.134 (.095)	-	-0.015 (.099)	-
Self-identify as a feminist	-0.043 (.40)	-	-0.732 (.397)	-
Believing men and women are equally suitable for politics	0.09 (.383)	-	-0.37 (.390)	-
Believing that men and women should have equal roles in society	0.473 (.296)	-	-0.008 (.302)	-
Self-Assessments				
Confidence of winning one's first campaign for student government	1.247** (.293)	7.3	-1.281** (.292)	34.9
Encouragement				
Received encouragement to run for student government	0.121 (.846)	-	0.513 (1.04)	-
Received encouragement to run from a personal source	-0.481 (.729)	-	-0.659 (.964)	-
Received encouragement to run from a professional source	0.602 (.453)	-	-0.491 (.599)	-
Political Efficacy and Legitimacy				
Belief that student government officials are qualified for their positions	0.245 (.355)	-	-0.152 (.337)	-
Perceptions of the Playing Field				
Expectations of sexism in running for student government	0.194 (.302)	-	0.067 (.307)	-
Constant	-7.307** (2.03)		5.236** (1.81)	
Pseudo-R squared	0.26		0.256	
N	369		369	

Notes: Maximum changes in probabilities are based on the logistic regression results. Probabilities were calculated by setting all continuous independent variables to their means and all dummy variables to their modes. The change in probability reflects the independent effect a statistically significant variable exerts as I vary its value from its minimum to its maximum. Significance levels: ** $p < .01$; * $p < .05$.

Contrary to expectations, adherence to traditional conceptions of gender roles does not predict self-assessments. But political socialization, levels of political activity, and confidence in winning a campaign are significant factors. More specifically, respondents who received high levels of parental encouragement to run for office in the future are 13 percent less likely to self-assess as unqualified to serve in student government. Turning to the cross tabulation of parental encouragement growing up

across gender in Table 2.3, the relationship between sex and levels of parental encouragement growing up is statistically significant. While 21 percent of women reported receiving "frequent" encouragement from their parents, 34 percent of men reported "frequent" encouragement. Women reported receiving no encouragement at all much more frequently than men, with 47 percent reporting no encouragement, compared to 37 percent of men. Because lack of parental encouragement is a significant factor in depressing levels of self-assessment, this gender difference provides important insight into the factors holding women back from believing themselves qualified.

Table 2.3

	Percent of Students	
Question: When you were growing up, how frequently did your parents suggest that, someday, you should run for public office?	Women	Men
Never	47.2% *	36.50%
Occasionally	31.5 *	29.8
Frequently	21.3 *	33.7
N	286	104

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

The number of activities respondents participate in is also a significant predictor of self-assessing as highly qualified to serve in student government. As demonstrated in Table 2.2, each increase in the number of activities in which a respondent participates results in an averaged 2.2 percent increase in the likelihood that they self-assess as highly qualified. As the crosstabs assessment in Table 2.4 shows, women are significantly less likely to participate in higher numbers of student government activities. While 14 percent of men report participating in between 5 and 7 activities, only 5 percent of women do; and whereas 48 percent of men report participating in 0 or 1 activity, 56 percent of women do. A crosstabulation of which activities students participate in reveals that not only is sex a significant factor in determining how many activities a respondent participates in, but also what kind of activities. As Table 2.5 shows, while women participate in fewer activities across the board, they especially avoid contacting student government officials and attending student government meetings – activities that would likely best prepare them for serving in student government and would provide them with contacts within student government. Indeed, 22 percent of men reported contact with a student government official in the past year; only 11 percent of women reported the same. Likewise, while 20 percent of men attended a student government meeting over the course of the last year, only 9 percent of women did.

Table 2.4

	Percent of Students who Participated in the Following Number of Student Government Activities over the Past Year	
	Women	Men
0	26.6% *	19.20%
1	29.4 *	28.8
2	21.7 *	15.4
3	13.3 *	17.3
4	4.2 *	5.8
5	1.7 *	5.8
6	2.8 *	4.8
7	0.3 *	2.9
N	286	104

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

Table 2.5

	Percent of Students who Participated in the Following Number of Student Government Activities over the Past Year	
	Women	Men
Voted in 2009 student government elections	45.50%	52.90%
Wrote an editorial for the eagle	2.4	4.8
Joined or participated in a club on campus	54.3	63.5
Contacted a student government official	11.2 **	22.1
Volunteered for a student government campaign	7.3	13.5
Attended a student government campaign	8.7 **	20.2
Joined a student government candidate's group on Facebook	28	35.6
N	286	104

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

3. Considering Running for Public Office Later in Life

Multiple and bivariate regression analyses find that the gendered differences in levels of political ambition that Lawless and Fox (2010; 2005) find among men and women in the political eligibility pool persist among male and female students when they considered running for student government. To explore to what extent these results apply to how students consider running for public office in the future, this study also examines students' ambition to run for public office in the future and the factors that contribute to it.

Similar to Section 1, I performed two regression analyses in order to assess the impact of sex, political socialization, views of gender roles, and self-assessment of qualifications to serve in student

government on political ambition. The models in this section predict whether the respondent indicated that running for political office is "something [he/she] would definitely like to undertake in the future" and whether running for political is "something [he/she] would absolutely never do." Consistent with previous sections, these models control for school affiliation within American University, interest in politics, and attitudes toward the legitimacy and efficacy of American politics and elected officials.

These models perform very well and provide interesting insight into the role sex plays in influencing political ambition. Notably, sex itself is not statistically significant in predicting whether a respondent reports high levels of interest in running for political office, nor even no interest in running for office. Closer examinations of indicators that are statistically significant in predicting political ambition, however, indicate that gender does play a significant role.

Table 3.1

	High Interest in Running for Office in the Future		No Interest in Running for Office in the Future	
	Coefficient (and standard error)	Maximum Change in Probability (Percentage Points)	Coefficient (and standard error)	Maximum Change in Probability (Percentage Points)
Baseline Indicators				
Sex	0.866 (.878)	-	0.286 (.513)	-
School of Public Affairs	-1.085 (.913)	-	0.524 (.548)	-
School of International Service	-1.695 (.974)	-	0.598 (.495)	-
Kogod School of Business	-1.671 (1.317)	-	-0.02 (.629)	-
College of Arts and Sciences	-1.17 (.826)	-	1.236** (.464)	8.1
School of Communication	-0.725 (1.106)	-	0.536 (.582)	-
Political interest	0.915* (.426)	7.7	-0.352 (.242)	-
Political participation	0.162 (.1380	-	-0.212 (.117)	-
Political Socialization				
Frequency political discussions with parents	-0.227 (.325)	-	0.412 (.218)	-
Encouragement to run for office growing up	0.533 (.347)	-	-0.696** (.243)	4.6
Having parents who ran for political office	1.94* (.871)	12.7	-0.53 (.643)	-
Views of Traditional Gender Roles				
Household composition growing up	-0.043 (.133)	-	-0.139 (.097)	-
Self-identify as a feminist	0.09 (.614)	-	0.375 (.364)	-
Believing men and women are equally suitable for politics	0.048 (.597)	-	-0.978** (.372)	14.8
Believing that men and women should have equal roles in society	-0.335 (.400	-	0.145 (.298)	-
Self-Assessments				
Self-assessment of potential future candidacy	3.4** (.927)	41.7	-1.493** (.283)	14.2
Belief that one has the thick skin and confidence to run	0.479 (.586)	-	-0.033 (.387)	-
Encouragement				
Received encouragement to run for student government	1.874 (1.39)	-	1.28 (.910)	-
Received encouragement to run from a personal source	-1.311 (1.146)	-	-1.676* (.844)	2.6
Received encouragement to run from a professional source	-0.822 (.624)	-	-0.286 (.513)	-
Political Efficacy and Legitimacy				
Belief that politicians are qualified for their positions	0.804 (.642)	-	-0.392 (.373)	-
Belief that most people who run for office are well-intentioned	-1.549** (.575)	8.3	-0.816* (.355)	4.4
Perceptions of the Playing Field				
Expectations of sexism in running for political office	-0.899 (.637)	-	0.602* (.301)	4.7
Feelings About Campaign Activities				
Attending fundraising events	-0.566 (.39)	-	-0.032 (.246)	-
Public speaking and debate	0.839 (.587)	-	0.024 (.235)	-
Going door to door to speak to constituents	0.655 (.413)	-	-0.022 (.205)	-
Public criticism and scrutiny	-0.246 (.449)	-	-0.189 (.251)	-
The amount of time required	0.766 (.447)	-	0.197 (.235)	-
Constant	-16.59** (5.12)		4.396* (1.85)	
Pseudo-R squared	0.304		0.34	
N	358		358	

Notes: Maximum changes in probabilities are based on the logistic regression results. Probabilities were calculated by setting all continuous independent variables to their means and all dummy variables to their modes. The change in probability reflects the independent effect a statistically significant variable exerts as I vary its value from its minimum to its maximum. Significance levels: ** $p < .01$; * $p < .05$.

Bivariate analysis of significant predictors of political ambition in the regression equations across sex reveal significantly gendered findings. Turning first to measures of political socialization, having parents who ran for office and having received parental encouragement to run growing up significantly impact political ambition. Those with parents who ran for political office are 13 percent more likely to indicate high levels of interest in running for political office in the future. And those who received "frequent" parental encouragement to run for political office growing up are 18 percent less likely to report no interest in running themselves. Referencing again Table 2.3, it is important to recognize women's lower levels of parental encouragement.

Adhering to traditional conceptions of gender roles is also significant in predicting whether a respondent has low political ambition. Both men and women who reject the idea that politics is a male field are more likely to have high levels of political ambition. This bodes well for future generations, since women are increasingly likely to reject traditional gender roles. As it stands, though, this study shows that the anticipation of sex-discrimination in running for office significantly depresses political ambition. The second model shows that those who anticipate sex-based discrimination if they ran for political office are 5 percent more likely to report no interest in running. Looking at Table 3.2's cross tabulation of expectations of sex-based discrimination and sex, 94 percent of women anticipate experiencing at least some degree of sex-based discrimination if they were to run for political office.

Table 3.2

Question: If you were to run for elected office, to what extent would you expect to experience sex-based discrimination?	Percent of Students	
	Women	Men
Not at all	6.5% **	75.70%
Somewhat	71.6 **	20.2
A great deal	21.9 **	3.9
N	281	103

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

Interest in politics also significantly affects political ambition. Following national politics "very closely" increases the likelihood of having high political ambition by 8 percent (Table 3.1). As Table 3.3 shows, however, there is a significant gender disparity in how closely students follow national politics. While nearly half (43 percent) of men follow national politics, only 13 percent of women report following national politics "very closely." Looking at the number of political activities respondents report having participated in during the past year, another gender discrepancy emerges. Table 3.4 shows that women participate in fewer political activities than men. Only 3 percent of women participated in 7-10 political activities during the past year, compared to 10 percent of men. Further, 62 percent of women participated in between 0 and 2 activities, compared to only 42 percent of men.

Table 3.3

Question: How closely do you follow national politics?	Percent of Students	
	Women	Men
Not closely	14.3% **	6.70%
Somewhat closely	37.8 **	21.2
Closely	35.3 **	28.8
Very closely	12.6 **	43.3
N	286	104

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

4. Self-Assessments of a Potential Future Candidacy

As revealed in the bivariate analysis of sex and self-assessments of qualifications to serve in student government, a crosstabulation and chi square test of self-assessments of a potential future candidacy for elected office and sex find that women indicate believing they would make good future candidates far less frequently than men did. Table 4.1 reveals that while nearly 55 percent of men report confidence in a potential future candidacy, only 25 percent of women do. Those who believe they would make good future candidates for political office are over 40 percent more likely to have high levels of political ambition (Table 3.1). Since confidence in a future potential candidacy is the single most significant predictor of high levels of political ambition, this section further explores the role of sex in predicting a respondent's self-assessments of a potential future candidacy.

Table 4.1

Question: Do you believe you would be a good candidate to run for political office someday?	Percent of Students	
	Women	Men
No	34.5% **	16.30%
Yes	23.5 **	53.8
Unsure	42 **	29.8
N	281	104

Note: Significance levels of Chi-square test comparing women and men: ** p < .01; * p < .05

Similarly to Section 2, this section assesses the impact of sex, political socialization, and views of gender roles on the self-assessment of qualifications to run for political office in the future. I performed two regression analyses; the first model presented in Table 4.2 predicts whether the respondent believes that he/she would make a make a good candidate for office someday. The second logistic regression equation predicts whether the respondent reports that he/she would not make a good candidate for political office someday.

Table 4.2

	High Self-Assessment of Potential Future Candidacy		Low Self-Assessment of Potential Future Candidacy	
	Coefficient (and standard error)	Maximum Change in Probability (Percentage Points)	Coefficient (and standard error)	Maximum Change in Probability (Percentage Points)
Baseline Indicators				
Sex	-0.438 (.433)	-	0.742 (.434)	-
School of Public Affairs	0.719* (.484)	13.4	-0.975* (.492)	20.8
School of International Service	1.046 (.470)	-	-0.547 (.428)	-
Kogod School of Business	0.434 (.519)	-	0.222 (.495)	-
College of Arts and Sciences	-0.388 (.439)	-	0.098 (.409)	-
School of Communication	-0.457 (.588)	-	0.381 (.491)	-
Political interest	0.483* (.217)	12.2	0.11 (.209)	-
Political participation	0.075 (.088)	-	-0.151 (.098)	-
Political Socialization				
Frequency political discussions with parents	-0.174 (.20)	-	-0.2 (.184)	-
Encouragement to run for office growing up	0.427 (.203)	-	-0.119 (.197)	-
Having parents who ran for political office	0.427* (.547)	7.9	-0.373 (.522)	-
Views of Traditional Gender Roles				
Household composition growing up	-0.116 (.087)	-	0.059 (.084)	-
Self-identify as a feminist	-0.043 (.547)	-	0.204 (.317)	-
Believing men and women are equally suitable for politics	-0.041 (.337)	-	-0.508 (.319)	-
Believing that men and women should have equal roles in society	-0.32 (.262)	-	0.171 (.251)	-
Self-Assessments				
Belief that one has the thick skin and confidence to run	1.347** (.326)	19.1	-1.173** (.326)	24.0
Encouragement				
Received encouragement to run for student government	0.56 (.752)	-	-0.008 (.754)	-
Received encouragement to run from a personal source	-0.068 (.666)	-	-0.391 (.698)	-
Received encouragement to run from a professional source	-0.017 (.398)	-	-0.216 (.429)	-
Political Efficacy and Legitimacy				
Belief that politicians are qualified for their positions	0.685 (.358)	-	0.096 (.312)	-
Belief that most people who run for office are well-intentioned	0.077 (.314)	-	-0.539 (.297)	-
Perceptions of the Playing Field				
Expectations of sexism in running for political office	-0.52 (.298)	-	-0.131 (.275)	-
Feelings About Campaign Activities				
Attending fundraising events	0.171 (.226)	-	-0.253 (.208)	-
Public speaking and debate	0.34 (.262)	-	-0.249 (.205)	-
Going door to door to speak to constituents	0.542** (.209)	11.5	-0.103 (.179)	-
Public criticism and scrutiny	-0.045 (.242)	-	-0.054 (.211)	-
The amount of time required	0.331 (.227)	-	-0.334 (.207)	-
Constant	-.5.59** (1.99)		3.991* (1.66)	
Pseudo-R squared	0.366		0.247	
N	359		359	

Notes: Maximum changes in probabilities are based on the logistic regression results. Probabilities were calculated by setting all continuous independent variables to their means and all dummy variables to their modes. The change in probability reflects the independent effect a statistically significant variable exerts as I vary its value from its minimum to its maximum. Significance levels: ** $p < .01$; * $p < .05$.

Consistent with previous sections, both models control for school affiliation within American University, interest in national politics, and attitudes toward the legitimacy and efficacy of politics and politicians. While again, sex is not a significant predictor of self-assessment, looking at bivariate analyses of significant predictors across sex, significantly gendered findings emerge. Respondents who reported following national politics "very closely" were 12 percent more likely to believe that they would be good future candidates than those who reported to "not closely" follow national politics. This could prove damaging to the chances of women identifying themselves as good future candidates, as only 13 percent of women report following national politics "very closely" (Table 3.3). Once again, early parental encouragement to run for political office is a significant factor in predicting whether a respondent believes he or she would make a good future candidate. Those who received parental encouragement to run for office growing up are 8 percent more likely to self-assess positively than those who received no encouragenment.

Those who feel "very positive" about their abilities to deal with "public criticism and the high levels of public scrutiny involved in running for office" are 12 percent more likely to assess themselves as good future candidates than those who feel "very negative" about it. But as the crosstabs in Table 4.3 shows, substantially fewer women than men report high levels of comfort with public scrutiny (9 percent of women compared to 21 percent of men). In fact, far fewer women than men reported having any level of positive feelings toward their capacity to deal with high levels of public scrutiny and criticism. Only 36 percent of women reported feeling "positive" or "very positive" about it, while 63 percent of men did.

Table 4.3

Question: If you were to become a candidate for public office, how would you feel about dealing with the public criticism and high level of public scrutiny involved in running for office?	Percent of Students	
	Women	Men
Very Negative	10.7% **	3.90%
Negative	43.6 **	33.3
Positive	36.4 **	42.2
Very Positive	9.3 **	20.6
N	280	102

Along the same lines, whether the respondent believes he or she has "the thick skin and high levels of self confidence" to enter the political arena is also a significant predictor for attitudes toward a potential future candidacy. Those who believe they possess these qualities are 19 percent more likely to identify themselves as a good future candidate than those who do not. This factor proves a significant indicator in predicting the likelihood of self-identifying as not a good future candidate for political office, as shown in Table 4.1. Those who believe they are thick-skinned enough to run for office are 24 percent less likely to believe that they would not make a good future candidate for political office. The bivariate results reveal that women significantly more often believe they are not cut out for politics (Table 4.4). While only 36 percent of women think they have the crucial thick skin and self-confidence to enter politics, a full 60 percent of men reported believing they possess these qualities.

Table 4.4

Question: Do you believe you have the thick skin and high levels of self-confidence needed to enter the political arena?	Percent of Students	
	Women	Men
No	64.2% **	39.80%
Very closely	35.8 **	60.2
N	285	103

Discussion and Conclusion

Overall, some of these findings are encouraging for the future of gender parity in elected office. Sex, itself, is not a significant predictor of low political ambition among students with regard to student government or political office. Moreover, rejecting traditional notions of gender roles significantly reduced both men's and women's likelihood of expressing no interest in running for student government or political office. Since more women than men reject the confinements of traditional gender roles, this finding appears even more encouraging to prospects of gender parity in elected office in the future. It seems that the progress women have achieved in the political realm in recent years has made an impact on young women's perceptions of gender and politics. Young women have a growing pool of prominent female politicians to look up to as role models and have seen the first female Speaker of the House take office and the first female contender compete for a major party presidential primary ticket. Young women have received the message that a career in politics is open to them and have begun at least to leave the option open for the future.

Although sex does not always predict political ambition, it operates significantly in many of the factors that do predict ambition. While it appears that young women believe that politics is an acceptable career path for women, they tend not to apply that belief to their own lives. Women are significantly less likely to believe themselves highly qualified to serve in office. Since self-assessments of qualifications are the most significant predictors of ambition in the regression equations, women's lowered self-assessments significantly hinder them from running for student government and from seriously considering running for office in the future.

Women are also disadvantaged by gendered differences in political socialization, encouragement to run, and perceptions of the political playing field. While both men and women's political ambition benefit from having experienced a highly politicized upbringing and having received parental encouragement to run while growing up, far fewer women than men actually had that experience. Similarly, although women and men are more likely to be politically ambitious when they receive encouragement from family and friends to run for office, women are less likely than men actually to receive that encouragement (although the impact of this encouragement on political ambition in this study is less dramatic than found in previous research). Women are also more likely than men to perceive the political playing field as unequal. Significantly more women than men anticipate high levels of sex-based discrimination in running for both student government and political office, which proves a significant deterrent from running.

While none of these findings bode well for the prospect of gender parity in elected office, perhaps the most discouraging finding to emerge from this research is that overall, women exhibit less interest in student government and politics. Women indicate following student government and national political far less frequently than men and report participating in fewer student government and politi-

cal activities. Since the regression equations find political interest and participation to be significant predictors of political ambition and self-assessments of qualifications, this research begs further investigation into why women, while rejecting the idea that men are better suited for politics, express less interest in politics than men.

That these conclusions are largely consistent with those Lawless and Fox (2010; 2005) found among men and women in the eligibility pool suggests that the gender differences in political ambition that pervade the political eligibility pool persist among college students. This suggests that the origin of the gendered differences between men and women in terms of political ambition begin even earlier in life. These findings have practical implications for reaching gender parity in elected office. They show that efforts to instill confidence and encourage young women to run for office must take place at an early age, as gendered effects are already apparent and at work by the time young women reach college. That this study also finds gender differences in political ambition already present among undergraduate college students suggests that socialization is among the most important and earliest influences on the development of political ambition

This research opens the doors for further study of gendered differences in levels of political ambition among students. While this study provides a number of intriguing results, several improvements could be made. While I made an effort to identify and control for an extensive list of independent variables while running my regression tests (see Appendix B), further study could improve upon this list by adding several important variables. Race and political ideology should be accounted for as factors known to have important influence on political participation. Further study should also take into account respondents' year in school. Since students learn more about student government and politics in general as they progress in their undergraduate years, it is likely that older students express higher levels of ambition on the whole than younger students and future study should also control for this factor.

This research would also be improved by collecting qualitative data along with the quantitative data from the survey. Conducting more extensive interviews with a random subset of the sample would provide a richer and more textured insight into why so few women run for student government, as well as young women's perceptions of running for political office.

This study's generalizability would be greatly improved by a larger sample size expanded to other universities across the county. While a sample of 398 students out of American University's approximate undergraduate population of 6,000 students provides a degree of confidence, the study would benefit from a larger sample size. Expanding this study nationally would allow the researcher to control for variables like region, ideological bent, and the characteristics of a particular university.

That said however, conducting this study at American University set the bar high for finding gender differences in political ambition. With its exceptionally politically active students, its predominantly female student population, and its location in Washington DC, not to mention the fact that it is home to the Women & Politics Institute – one of the premier academic organizations for women and politics in the country – American University should be a place where women stand out in their political ambition. This is not the case. Despite the advantages American University provides students to develop and express political ambition, women exhibit lower levels of political ambition than men, driven most substantially by lowered self-assessments of their qualifications to serve in office, and a less politicized upbringing.

Bibliography

Achen, Alexandra and Frank Stafford. "Data Quality of Housework Hours in the Panel study of Income Dynamics: Who Really Does the Dishes?" Institute for Social Research, University of Michigan, Sept 2005.

Boxer, Barbara. Politics and the New Revolution of Women in America. Washington, D.C.: National Press Books. 1994.

Bittman, Michael and Judy Wacjman. "The Rush Hour: The Character of Leisure Time and Gender Equality." Social Forces 79, no. 1: 191-228.

Campbell, David E., and Christina Wolbrecht. "See Jane Run: Women Politicians as Role Models for Adolescents." Journal of Politics 68, no. 2: 233-247. 2006.

Darcy, Robert, Susan Welch, and Janet Clark. Women, Elections, and Representation, 2nd ed. Lincoln: University of Nebraska. 1994.

Dolan, Kathleen. "How the Public Views Women Candidates" Women and Elective Office: Past Present, and Future. New York: Oxford University Press. 2005.

Dolan, Kathleen. "Voting for Women in the 'Year of the Woman.'" American Journal of Political Science 42(1): 272-93. 1998.

Factsheet: Women in Elective Office 2012 Rutgers Center for American Women and Politics http://www.cawp.rutgers.edu/fast_facts/levels_of_office/documents/elective.pdf (Accessed September 1, 2012).

Frankovic, Kathy. "Gender And Race in the Democratic Primary: In the Wake of the New Hampshire Primary, Questions About Voters' Gender and Race in the Democratic Primary" (January 11, 2008). Cbsnews.com http://www.cbsnews.com/stories/2008/01/11/opinion/pollpositions/main3699655.shtml

Glanville, Jennifer. "Political socialization or selection? Adolescent extracurricular participation and political activity in early adulthood in the US," Social Science Quarterly 80 (2). 1999.

Kirkpatrick, Jeanne. Political Woman. New York: Basic Books. 1974.

Kazee, Tomas A. "The Emergence of Congressional Candidates, In. T. Kazee (ed.), Who Runs for Congress? Ambition, Context, and Candidate Emergence, Washington, DC: Congressional Quarterly. 1994.

Lawless, Jennifer and Richard Fox. It Takes A Candidate: Why Women Don't Run for Office. New York: Cambridge University Press. 2005.

Mansbridge, Jane. "Should Blacks Represent Blacks and Women Represent Women? A Contingent 'Yes.'" Journal of Politics 61(3): 628-57. 1999.

Miller, Carol and Mindy Krauss. "Participating but not leading: women's under-representation in student government leadership positions," College Student Journal (Sept) 2004. http://findarticles.com/p/articles/mi_m0FCR/is_3_38/ai_n6249227/.

Moncrief, Gary F., Peverill Squire and Malcolm E. Jewell. Who Runs for the Legislature? Upper Saddle River: Prentice Hall. 2001.

Rohde, David W. "Risk-Bearing and Progressive Ambition: The Case of the Members of the United States House of Representatives." American Journal of Political Science 23, no. 1: 1. 1979

Smith, E. S. "Socialization, Self-Presentation and Political Ambition: A Study of Young Women's Interest in Public Office" Paper presented at the annual meeting of the Southern Political Science Association, Hotel InterContinental, New Orleans, LA Online Jan 3, 2007. http://www.allacademic.com/meta/p142912_index.html. (accessed October 16, 2009).

Stone, Walter J., and L. Sandy Maisel. "The Not-So-Simple Calculus of Winning: Potential U.S. House Candidates' Nomination and General Election Prospects." Journal of Politics 65, no. 4: 951-977. 2003.

Thomas, Sue. "Introduction: Women and Elective Office: Past, Present, and Future," In S. Thomas and C. Wilcox (eds.), Women and Elective Office, New York: Oxford University Press. 1998.

Appendix A

Instructions:

Thank you for participating in this survey. The survey is 35 questions and should take approximately 10 minutes to complete. Your participation serves as consent to the usage of your responses for the purposes of this study. All of your answers are confidential and will be used only for the purposes of this study. Please answer the questions to the best of your ability. You may skip questions and opt out of the survey at any time. You may also choose to provide your name and email address at the end of this survey to be entered into a raffle for a chance to win 1 of 6 assorted gift certificates; however your personal information will not be linked with your survey responses.

If you have any questions regarding the survey or the nature of this research, please feel free to contact me at ad0949a@student.american.edu. Thank you for your time and your help in this endeavor.

Part1 – First we would like to ask you some questions regarding your background.

1. What is your sex?
   - Male
   - Female

2. To which school to you belong at American University?
   - School of Public Affairs
   - School of International Service
   - Kogod School of Business
   - College of Arts and Sciences
   - School of Communication

3. Growing up, how frequently did your parents discuss politics with you?
   - Frequently
   - Occasionally
   - Seldom
   - Never

4. Growing up, was your mother or father more likely to discuss politics with you?
   - Mother
   - Father
   - Both spoke equally
   - Neither

5. When you were growing up, how frequently did your parents suggest that, someday, you should run for public office?

- Frequently
- Occasionally
- Seldom
- Never

6. When you were growing up, what description best characterizes the arrangements in your household:
   - I grew up in a one-career household where my father was the primary breadwinner and my mother was the primary caretaker of the household.
   - I grew up in a one-career household where my mother was the primary breadwinner and my father was the primary caretaker
   - I grew up in a two-career household where my parents shared household duties evenly
   - I grew up in a two-career household where my mother was responsible for most house hold duties
   - I grew up in a two-career household where my father was responsible for most household duties
   - I grew up in a single parent household with my mother
   - I grew up in a single parent household with my father
   - Other

7. Did either of your parents ever run for elective office?
   - Yes, both parents
   - Yes, my father
   - Yes, my mother
   - No

Part 2 – We would like to ask you about your political attitudes and the ways you participate politically

1. How closely do you follow national politics?
   - Very closely
   - Closely
   - Somewhat closely
   - Not closely

2. How closely do you follow AU student government politics?
   - Very closely
   - Closely
   - Somewhat closely
   - Not closely

3. In which, if any, of the following activities have you engaged during the past year?

- Voted
- Wrote a letter to a newspaper
- Joined or paid dues to a political interest group
- Contacted an elected official (by phone, email, letter, etc)
- Contributed money to a campaign
- Volunteered or worked for a political candidate
- Joined a group in the community to address a local issue
- Attended a city council, school board, or town hall meeting
- Contributed to a political blog
- Joined a political group on Facebook

4. In which, if any, of the following activities have you engaged at AU during the past year?
   - Voted in 2009 student government election
   - Wrote an editorial for the Eagle
   - Joined or participated in a club of student organization on campus
   - Contacted a student government official
   (by phone, email, letter, etc)
   - Volunteered for a student government campaign
   - Attended a student government meeting
   - Joined a student government candidate's group on Facebook

5. Do you consider yourself a feminist?
   - Yes
   - No

6. To what degree do you agree with the statement, "Men and women should have equal roles in society"?
   - Strongly Agree
   - Agree
   - Disagree
   - Strongly Disagree

7. Which statement best describes how you feel about people who run for political office?
   - Most people who run for office are very well intentioned and genuinely hope to improve society.
   - Most people who run for office are generally interested in their own fame and power.

8. If you felt strongly about a government action or policy, how likely would you be to engage in each of the following political activities?

- Give money to a political candidate who favors your position
   - Very unlikely
   - Unlikely

- Likely
- Very Likely

- Volunteer for a candidate or group that favors your position
  - Very unlikely
  - Unlikely
  - Likely
  - Very Likely
- Organize people in the community to work on the issue
  - Very unlikely
  - Unlikely
  - Likely
  - Very Likely
- Directly lobby or contact government officials
  - Very unlikely
  - Unlikely
  - Likely
  - Very Likely

9. To what extent do you agree with the statement "men are better suited emotionally for politics than most women"?

- Strongly
- Somewhat
- Not at all

10. People often say that, to enter the political arena, you need to have a thick skin and high levels of self-confidence. To what extent do you agree with this assessment?

- Strongly
- Somewhat
- Not at all

11. Do you believe that you posses those qualities?

- Yes
- No
- Unsure

Part 3 – The next series of questions deal with your attitudes toward running for office. We realize that most students have never considered running, but your answers are still very important.

1. Which of the following options do you think is the most effective way for you to get American University to address a certain issue?

- Run for student government
- Form or join a club or student organization to lobby the student body and AU leadership

- Support a student government candidate who shares your views
- Write an editorial for a school publication
- Contact a student government official directly (by phone, email, letter, etc)
- Participate in student government meetings

2. Generally speaking, do you think most AU student government officials are qualified for the positions they hold?
- Yes
- No

3. Generally speaking, do you think most local, state, and national elected officials are qualified for the positions they hold?
- Yes
- No

4. Do you believe you would be a good candidate to run for political office someday?
- Yes
- No
- Unsure

5. If you were to become a candidate for public office, how would you feel about engaging in the following aspects of a campaign?
- Attending fundraising function
  - Very positive
  - Positive
  - Negative
  - Very negative
- Delivering speeches and participating in debates in front of large groups of people and/or on television
  - Very positive
  - Positive
  - Negative
  - Very negative
- Going door to door to meet constituents
  - Very positive
  - Positive
  - Negative
  - Very negative
- Dealing with public criticism and high level of public scrutiny involved in running for office
  - Very positive
  - Positive
  - Negative

- Very negative

- The amount of time it takes to run for office
  - Very positive
  - Positive
  - Negative
  - Very negative

6. Which best characterizes your attitudes toward running for public office in the future?
   - It is something I definitely would like to undertake in the future
   - It is something I might undertake if the opportunity presented itself but I currently have no interest
   - It is something I would absolutely never do

7. What offices might you ever be interested in running for?
   - School board
   - Mayor
   - State legislator
   - Member of the U.S. House of Representatives
   - U.S. Senator
   - President
   - City, County, or Town Council
   - Governor
   - Statewide Office (i.e., Attorney General)
   - I would never run for any office

8. If you were to run for public office, to what extent would you expect to experience sex-based discrimination?
   - A great deal
   - Somewhat
   - Not at all

9. Which best characterizes your attitudes toward running for student government in the future?
   - It is something I definitely would like to undertake in the future
   - It is something I might undertake if the opportunity presented itself but I currently have no interest
   - It is something I would absolutely never do

10. Have you ever held office within student government (at AU or otherwise)?
    - Yes
    - No

11. If no, have you ever run for student government office (at AU or otherwise)?
    - Yes
    - No

12. If you have ever thought about running for student government, have you ever taken any of the following steps?
    - Discussed running with student government officials
    - Discussed running with friends and family
    - Discussed running with other members of the school community
    - Investigated how to place your name on the ballot
    - Attended Campaign College

13. Regardless of your interest in running for student government, have any of the following individuals ever suggested that you run for student government?
    - A student government official
    - A professor or academic advisor
    - A classmate
    - A friend
    - A family member
    - A leader of a club or activity in which you participate

14. Would you be more likely to run for student government if:
    - A professor or advisor suggested you run?
    - A member of student government suggested you run?
    - A friend suggested you run?
    - You had more free time?
    - There were issues you felt passionate about?
    - You knew there was support for your candidacy?
    - You had previous experience campaigning?

15. How qualified do you feel you are to hold office in student government?
    - Very qualified
    - Qualified
    - Somewhat qualified
    - Not qualified

16. If you were to run for student government, to what extent would you expect to experience sex-based discrimination?
    - A great deal
    - Somewhat
    - Not at All

17. If were to become a candidate for student government, how likely do you think it is that you would win your first campaign?

- Very Likely
- Likely
- Unlikely
- Very unlikely

* If you would like to be entered to win a prize for completing this survey, please enter your name and email address below. Your personal information will remain confidential and will not be linked to your survey responses.

Appendix B

Dependent Variables:

Student Government

Variable	Range	Mean	Standard Deviation	Coding
Definitely would consider running for student government	0,1	0.06	0.24	Indicates whether respondent would definitely consider running for student government. Ranges from definitely would (1) to might or would not (0)
Definitely would not consider running for student government	0,1	0.51	0.501	Indicates whether respondent would never consider running for student government. Ranges from definitely would never (1) to might or definitely would (0).
Having run or served in student government	0,1	0.238	0.427	Indicates whether respondent has ever run for or served in student government. Ranges from has done either (1) to has done neither (0).
Self-assessment as very qualified to serve in student government	0,1	0.171	0.377	Indicates whether respondent perceives him or herself as very qualified to serve in student government (1) or not (0).
Self-assessment as not qualified to serve in student government	0,1	0.181	0.386	Indicates whether respondent perceives him or herself as not qualified to serve in student government (1) or not (0).

Future Political Offices

Variable	Range	Mean	Standard Deviation	Coding
Definitely would consider running for public office later in life	0,1	0.11	0.31	Indicates whether respondent would definitely consider running for public office in the future. Ranges from definitely would (1) to might or would not (0)
Definitely would not consider running for public office later in life	0,1	0.26	0.441	Indicates whether respondent would never consider running for public office in the future. Ranges from definitely would never (1) to might or definitely would (0).
Would be interested in running for School Board	0,1	0.39	0.488	Indicates whether respondent would be interested in running for School Board in the future. Ranges from would be interested (1) to would not be interested (0).
Would Be interested in running for Mayor	0,1	0.24	0.425	Indicates whether respondent would be interested in running for Mayor in the future. Ranges from would be interested (1) to would not be interested (0).
Would be interested in running for State Legislature	0,1	0.32	0.469	Indicates whether respondent would be interested in running for State Legislature in the future. Ranges from would be interested (1) to would not be interested (0).
Would be interested in running for the U.S. House of Representatives	0,1	0.32	0.468	Indicates whether respondent would be interested in running for U.S. House of Representatives in the future. Ranges from would be interested (1) to would not be interested (0).
Would be interested in running for the U.S. Senate	0,1	0.3	0.457	Indicates whether respondent would be interested in running for U.S. Senate in the future. Ranges from would be interested (1) to would not be interested (0).
Would be interested in running for President	0,1	0.14	0.343	Indicates whether respondent would be interested in running for President in the future. Ranges from would be interested (1) to would not be interested (0).

Would be interested in running for City, County, or Town Council	0,1	0.39	0.487	Indicates whether respondent would be interested in running for City, County, or Town Council in the future. Ranges from would be interested (1) to would not be interested (0).
Would be interested in running for Governor	0,1	0.21	0.411	Indicates whether respondent would be interested in running for Governor in the future. Ranges from would be interested (1) to would not be interested (0).
Would be interested in running for Statewide Office (i.e. Attorney General)	0,1	0.29	0.455	Indicates whether respondent would be interested in running for Statewide Office in the future. Ranges from would be interested (1) to would not be interested (0).
Would not be interested in running for any office	0,1	0.25	0.431	Indicates whether respondent would not consider running for any of the mentioned offices. Ranges from would never run for any (1) to would run for at least one (0).
Would be interested un running for local office (school board, mayor, or city/ town council)	0,1	0.59	0.493	Indicates whether respondent would be interested in running for a local-level office (school board, mayor, and/or city, county or town council) in the future. Ranges from would be interested (1) to would not be interested (0).
Would be interested in running for State-level office (state legislature, statewide office, or governor)	0,1	0.47	0.5	Indicates whether respondent would be interested in running for a state-level office (state legislature, statewide office, and/or governor) in the future. Ranges from would be interested (1) to would not be interested (0).
Would be interested in running for Federal Office (Congress or the Presidency)	0,1	0.37	0.484	Indicates whether respondent would be interested in running for a federal-level office (U.S. House of Representatives, U.S. Senate, and/or President) in the future. Ranges from would be interested (1) to would not be interested (0).

Believing oneself to be a good future candidate for political office	0,1	0.32	0.466	Indicates whether respondent believes he or she would be a good candidate to run for political office in the future (1) or not (0).
Believing oneself to be a good future candidate for political office	0,1	0.298	0.458	Indicates whether respondent believes he or she would not be a good candidate to run for political office in the future (1) or not (0).

Independent Variables:

Variable	Range	Mean	Standard Deviation	Coding
Sex	0,1	0.73	0.433	Indicates whether respondent is female (1) or male (0)

School Affiliation within the University

Variable	Range	Mean	Standard Deviation	Coding
School of Public Affairs	0,1	0.24	0.428	Indicates whether respondent is enrolled in the School of Public Affairs at American University. Ranges from yes (1) to no (0).
School of International Service	0,1	0.34	0.473	Indicates whether respondent is enrolled in the School International Service at American University. Ranges from yes (1) to no (0).
Kogod School of Business	0,1	0.11	0.316	Indicates whether respondent is enrolled in the Kogod School of Business at American University. Ranges from yes (1) to no (0).
College of Arts and Sciences	0,1	0.39	0.488	Indicates whether respondent is enrolled in the College of Arts and Sciences at American University. Ranges from yes (1) to no (0).
School of Communication	0,1	0.12	0.488	Indicates whether respondent is enrolled in the School of Communication at American University. Ranges from yes (1) to no (0).

Political Socialization

Variable	Range	Mean	Standard Deviation	Coding
Frequency of political discussions with parents	1-4	2.88	0.847	Indicates how frequently respondent discussed politics with parents growing up. Ranges from frequently (4) to never (1).
Encouragement to run for office growing up	1-3	1.8	0.807	Indicates how frequently respondent was encouraged by parents to run for public office growing up. Ranges from frequently (4) to never (1).
Having Parents who ran for elected office	0,1	0.09	0.282	Indicates whether either of respondent's parents ran for office (1) or not (0).

Views of Traditional Gender Roles

Household composition growing up	1-8	6.31	1.77	Indicates the composition of the household in which the respondent was raised. Responses descend from most traditional to least traditional: (8) grew up in a one-income household where the father is the primary breadwinner and the mother is the primary caretaker of the home; (7) grew up in a two-career household where their mother was responsible for most household duties; (6) grew up in a two-career household where their mother was responsible for most household duties; (5) grew up in a two-career Household where their parents shared household duties evenly; (4) grew up in a one-career household where their mother was the primary breadwinner and their father was the primary caretaker; (3) grew up in a single parent household with their mother; (2) grew up in a single parent household with their father; (1) grew up in a household that does not fit any of these descriptions.
Self-Identifying as a feminist	0,1	0.4	0.49	Indicates whether respondent self-identifies as a feminist (1) or not (0)
Believing men and women are equally suitable for politics	1-3	2.76	0.474	Indicates the extent to which respondent agrees with the statement "men are better suited emotionally for politics." Ranges from strongly (3) to not at all (1)
Believing that men and women should have equal roles in society	1-4	3.49	0.628	Indicates the extent to which respondent believes that men and women should have equal roles in society. Ranges from strongly agrees (4) to strongly disagrees (1)

Self-assessment of Qualifications

Self-assessment of qualifications to serve in student government	1-4	2.46	0.979	Indicates respondent's level of self-perceived qualifications for serving in student government. Ranges from very qualified (4) to not qualified (1).
Confidence of winning one's first campaign for student government	1-4	2.37	0.757	Indicates how likely respondent feels he or she would win a campaign for student government. Ranges from very likely (4) to very unlikely (1).
Believing oneself to be a good future candidate for political office	1-3	2.02	0.784	Indicates whether respondent believes he or she would be a good candidate to run for political office in the future. Ranges from yes (3) to no (1).
Believing oneself to have the thick skin and high levels of self-confidence to run for office	0,1	0.42	0.494	Indicates whether respondent believes he or she has the thick skin and high levels of self-confidence needed to run for office (1) or not (0).

Encouragement

Received encouragement to run for student government	0,1	0.56	0.497	Indicates whether respondent has received any encouragement to run for student government (1) or not (0).
Received encouragement to run for student government from a personal source	0,1	0.522	0.5	Indicates whether respondent has received encouragement from a family member, friend, or classmate to run for student government (1) or not (0).
Received encouragement to run for student government from a source of higher authority (a professor, student government official or a club leader)	0,1	0.263	0.441	Indicates whether respondent has received encouragement from a professor or advisor, student government official, or club leader to run for student government (1) or not (0).

Political Efficacy and Legitimacy

Political Efficacy and Legitimacy

Belief that student government officials are qualified for their positions	0,1	0.54	0.499	Indicates whether respondent believes that, in general, most student government officials are qualified for the positions they hold (1) or not (0).
Belief that elected government officials are qualified for their positions	0,1	0.69	0.464	Indicates whether respondent believes that, in general, most elected government officials are qualified for the positions they hold (1) or not (0).
Belief that elected government officials are well-intentioned public servants	0,1	0.53	0.5	indicates whether respondent believes that most people who run for office are well-intentioned and genuinely hope to improve society (1) or that most people who run for office are generally interested in their own fame and power (0).

Expectations of Sex-Based Discrimination

Expectations of the presence of sex-based discrimination when running for student government	1-3	1.44	0.594	Indicates the amount of sex-based discrimination respondent would expect to encounter in running for student government. Ranges from a great deal (3) to none (1).
Expectations of the presence of sex-based discrimination when running for public office later in life	1-3	1.92	0.645	Indicates the amount of sex-based discrimination respondent would expect to encounter in running for public office in the future. Ranges from a great deal (3) to none (1).

Feelings about Campaign Activities

Feelings about attending fundraising functions	1-4	3.13	0.772	Indicates respondent's feelings about attending fundraising functions for a campaign. Ranges from very positive (4) to very negative (3).
Feelings about delivering speeches and participating in debates in public	1-4	3.26	0.791	Indicates respondent's feelings about delivering speeches and participating in debates in public. Ranges from very positive (4) to very negative (3).
Feelings about going door to door to meet constituents	1-4	3.04	0.88	Indicates respondent's feelings about going door to door to meet constituents. Ranges from very positive (4) to very negative (3).
Feelings about dealing with public criticism and scrutiny	1-4	2.54	0.824	Indicates respondent's feelings about dealing with the public criticism and scrutiny involved in running for office. Ranges from very positive (4) to very negative (3).
Feelings about with the amount of time it takes to run for office	1-4	2.58	0.806	Indicates respondent's feelings about the amount of time it takes to run for office. Ranges from very positive (4) to very negative (3).

TESTED AND FOUND WANTING: A QUANTITATIVE ANALYSIS OF LEGAL INTEGRATION IN THE MEMBER STATES OF THE 2004 EUROPEAN UNION ENLARGEMENT

Leigh Maltby

The subject of European legal integration entered the spotlight of interdisciplinary studies in the mid-1990s and has continued to maintain, if not increase, its prominence in scholarly literature (Mattli and Slaughter, 1998, 177-178). As Egan, Nugent and Paterson indicate, "Not only have different disciplines cast light on different aspects of the integration process and of the EU but so has there been a mushrooming of varying approaches to EU studies within disciplines" (Egan, Nugent and Paterson, 2010, 1-13). Scholars using a variety methods conclude that European legal integration would not have succeeded were it not for the European Court of Justice's implementation of the doctrines of legal supremacy and direct effect, as well as the channel of preliminary reference rulings embedded in Article 177 of the Treaty of Rome. According to Article 177, national judges are allowed to, and in some cases obligated to, ask the European Court of Justice (ECJ) for an interpretation of a European Union (EU) law when EU law is germane to the case at hand. Many scholars argue that Article 177 is the primary mechanism through which the ECJ has expanded its power and attempted to integrate the legal systems of Europe. As Alec Stone Sweet and Thomas L. Brunell state, "the preliminary reference procedure developed into a decentralized means of enforcing EC law and…of incorporating EC law into national law" (Sweet and Brunell, 1998, 67).

Considering the increasing interest in the European Court of Justice throughout political science, legal studies and international relations, it is no surprise that theories abound as to how the Court was able to legally integrate Europe. These theories seek to explain a wide range of phenomena including general European legal integration, support for the ECJ, and the co-existence of national popular sovereignty and European legal supremacy. Nonetheless, one sub-category of European legal integration research is gaining momentum across disciplines: an explanation for the variance in the number of Article 177 references received by the ECJ each year. Some of these studies focus on specific member states' patterns of Article 177 referrals, while others undertake an analysis of the trends of the number of Article 177 references made on different topics. It is this smaller field of European legal research that I hope to contribute to through a statistical analysis of the trends of the number of Article 177 references made by the member states that joined the EU during the 2004 enlargement. Scholars have already conducted substantial research on the Article 177 reference trends -- the patterns and inconsistencies in the number of times Article 177 has been invoked by member states to refer a case or point of clarification to the ECJ, for the EU-15. Thus, my research question is: what explains the trends of the number of Article 177 references made by member states that joined the European

Union in 2004?[1]

Literature Review

The theories reviewed for this analysis seek to answer two basic questions: "How [did] the ECJ [come] to be an authoritative legal and political institution, and how [was] an international rule of law – which actually works – created within the EU?" (Alter, 1996, 459). Historically, these philosophies build upon two of the founding theories of European integration – neo-functionalism and intergovernmentalism. Recently, though, scholars have begun integrating international relations and European legal integration theories, creating neo-realist and social constructivist proposals of why and how European legal integration occurred.

Neo-functionalism focuses on the factors that precipitate integration; arguing that the self-interest of different groups within member states, international and supranational institutions, and domestic and multinational organizations precipitate action that propels integration forward (Jensen, 2010, 176-188). On the other hand, neo-realist suppositions of the integral role played by member states guide integovernmentalist integration theory. Intergovernmentalism asserts that though the individual states may pool their sovereignty and dictate powers to the EU and its institutions, the member states of the EU retain their national sovereignty because they act based on their perceived best interests (Cini, 2010, 86-103).

Alter's version of neo-functionalism contends that judicial empowerment of national lower courts, competition between constitutional courts and courts of first instance within member states, and domestic political interests transformed European legal integration (Alter, 1996, 471-481). In her qualitative approach, the three independent variables presented incorporate judicial interests at two levels of national judiciaries and domestic political concerns, both of which directly influence the number of Article 177 references presented to the ECJ (Alter, 1996, 458-481). Not only do these variables contribute directly to possible reasons why the number of member state references differs, they also suggest that any comprehensive comparison between member states' trends of the number of Article 177 references made to the ECJ must take place on a state level, rather than an aggregated, multi-state level. However, Alter's analysis fails to take into account the referrals made by national courts other than courts of first instance or constitutional courts, a problem which stems from her conceptualization of lower courts as only courts of first instance (Alter, 1996, 466). Another flaw in this theory is that the only actors considered are national lower and higher court judges, domestic politicians and ECJ judges.

An additional neo-functionalist theory championed by Jonathan Golub purports that the 'traditional model' of European legal integration – any integration model that contends that the role of national judges is to provide the ECJ with Article 177 cases (as in Alter's theory) – assumes that all member states will have a high rate of preliminary references and that national judges only have incentives to make referrals (Golub, 1996, 360-385). Through a case-study analysis of environmental

1 The above research question is feasible in the sense that much of the information required is accessible through the internet. The social importance and scientific relevance of attempting to provide an explanation for the trends of the number of preliminary ruling references made by member states who joined in the 2004 enlargement is that such an explanation enters into dialogue with much of the already existing European legal literature, and the final product could easily produce research on the 2004 member states that has yet to be thoroughly researched and documented. Also, through a focus on only the 2004 enlargement, the data becomes manageable for an undergraduate researcher. Finally, the assumption inherent in this question is that the number of preliminary ruling references each member state submits to the ECJ form measurable trends.

law in Britain, Golub demonstrates that national judges actually face many political disincentives for referring cases to the ECJ (Golub, 1996, 361). These disincentives differ between member states and topics (Golub, 1996, 375-381). These disincentives, the political structure of each judiciary, and the amount of time the nation has been a member state effects the number of preliminary references from each state (Golub, 1996, 375-381). In spite of Golub's narrow case study, his chosen independent variables imply future research should focus analyses on the trends in topics considered in Article 177 references across member states and include the length of EU membership and the political structure of the member state as independent variables.

Stone Sweet and Brunell test Alter and Golub's theories through statistical analyses of the EU-15, utilizing a dataset of preliminary references they assembled over many years of research in conjunction with the research offices of the ECJ. They also propose their own theory that the variance in the number of Article 177 references is caused by differing levels of transnational activity among the member states. Their analyses conclude that cross-national theories that "emphasize the reciprocal impact of litigants and transnational exchange, EC law, and judicial rulemaking" are better supported by the dataset, completely dismissing Alter and Golub's neo-functionalist theories (Sweet and Brunell, 1998, 95).

Furthermore, Stone Sweet and Brunell rank European legal scholars, Walter Mattli and Anne-Marie Slaughter, 'judicial empowerment' thesis as a close second behind their own proposition (Sweet and Brunell, 1998, 95). Mattli and Slaughter pursue a synthesis of neo-functional and intergovernmental legal integration theory (Mattli and Slaughter, 1998, 177-209). First and foremost, Mattli and Slaughter contend that the core assumption of neo-functionalist and intergovernmental legal integration theory that a state is a unitary actor needs to be rescinded (Mattli and Slaughter, 1998, 184-185). Rather, the state is a mixture of sub- and supra-national actors (Mattli and Slaughter, 1998, 184-185). The second half of the article puts forth the theory that the interests of each of these actors, specifically those of national judges and individual litigants, and the constraints facing national courts in pursuing their interests – conceptions of judicial legitimacy, variation in national policy preferences and legal cultures and doctrines – all contribute to European legal integration (Mattli and Slaughter, 1998, 184-204). Despite Mattli and Slaughter's encouragement to perceive the state as part of a large network of both sub- and supra-national actors, their suggestion to operationalize the variables of actor interests and constraints through a detailed collection of the course of ECJ cases across a range of topics and from different member states corresponds more directly with in-depth qualitative case studies than my quantitative research design (Mattli and Slaughter, 1998, 206).

In direct contrast to Mattli and Slaughter's article is Geoffrey Garret, R. Kelemen and Heiner Schulz's neo-realist theory of European legal integration (Garrett, Kelemen and Schulz, 1998, 149-176). Garret, et. al., develop their theory around the core assertion that the ECJ and member states are rational strategic actors (Garrett, Kelemen and Schulz, 1998, 152). Through game theory analysis of three series of cases – agricultural imports, equal treatment of the sexes and state liability for violation of EU law – they demonstrate that the clarity of ECJ case law precedent, domestic costs to a member state of an ECJ ruling, the rate of activism of the ECJ, and the number of member state governments adversely affected by an ECJ ruling are all variables that influenced member state acceptance of European legal integration (Garrett, Kelemen and Schulz, 1998, 161-174). The problem inherent in this intergovernmentalist approach to European legal integration is that there are numerous other actors

beyond the ECJ and the state, as noted by many other European legal scholars. Garrett published an article in response to his critics, which conceded the point that actors other than the member states and the ECJ are involved in European legal integration, but held to his belief that governments utilize cost-benefit analysis when accepting European legal integration (Garrett, 1995, 171-181).

Not to be deterred, Mattli and Slaughter published a critique of Garrett's response in which they agree with Garrett's theory, and refine their own theory of state preferences (Mattli and Slaughter, 1995, 183-190). They contend that the ECJ would not have advanced without the legitimacy derived from the national courts (Mattli and Slaughter, 1995, 187). In a later work, Mattli and Slaughter refined their neo-functionalist theory even further and specified the incentives and constraints to judicial empowerment (Mattli and Slaughter, 2007, 253-276).

The debate between Garrett and Mattli and Slaughter informs prospective research agendas by establishing the conceptualization of member states and the ECJ as amalgamates of interconnected groups, networks, and institutions, all with their own interests. Moreover, the further refining of both theories provides researchers with more concrete variables and concepts to test, including the national judicial preferences of judicial review, judicial competition and promotion of national policies that promote the policy interests of national judges (Mattli and Slaughter, 2007, 259-265).

Kenneth Armstrong is another interdisciplinary scholar to incorporate international relations theory with his theory of European legal integration. He concludes that the independent variables espoused by institutional theory – the organization, procedures, and substantive and normative elements of national and European judicial systems – require researchers to reformulate their hypotheses to reflect the "differentiated and complex system of inter-linked regimes or networks" inherent in any given member state's judicial system, as well as in the ECJ (Mattli and Slaughter, 1995, 172). Armstrong's institutional integration theory imparts a specific independent variable that may have an effect on the trends of the number of Article 177 references made by member states: the structure and norms of both national and European courts. Still, the operationalization of these structures and norms presents an especially perplexing conundrum for researchers.

At the heart of Gregory Caldeira and James Gibson's social constructivist theory of legitimizing the ECJ is the assumption that a main component of legal integration is the acceptance of the ECJ as legitimate among the public (Caldeira and Gibson, 1995, 356-376). They build this theory through a quantitative analysis of independent variables that, they maintain, are typically not considered in legal integration theory (Caldeira and Gibson, 1995, 356). These variables include social class, unionized vs. nonunionized labor, gender, view of the EU, and how people perceive the law and knowledge of the ECJ (Caldeira and Gibson, 1995, 358-364). Caldeira and Gibson's independent variables demonstrate how to operationalize support for the ECJ as an independent variable, explaining the varied trends among member states. It also suggests that if a member state's population perceives the ECJ as legitimate, its number of Article 177 references will increase.

Concepts

The theories outlined above share five core concepts that are pertinent to my research due to their widespread use and incorporation across disciplines and theories of European legal integration: European legal integration, member states, disaggregate sovereignty and national courts. European legal integration is conceptualized as the synthesis of member states' national laws and legal systems

with European Union laws as brought about by the constitutionalization of the Treaty of Rome by the ECJ through the adoption and promotion of the doctrines of direct effect and EU legal supremacy (Sweet and Brunell, 1998, 67). This integration has taken place within EU member states, defined as those countries that include Weber's "coercive monopoly of the use of force:" a bounded territory within which a population of people share a common culture, language and rights under a specific legal system, are governed by the same political institutions and international recognition, and have relinquished some of their sovereignty to the European institutions upon entry into the EU. The 2004 member states are those member states that joined the EU through the 2004 enlargement: the Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

All of the theories of European legal integration tested in the forthcoming statistical analysis consider the member states to exhibit disaggregate sovereignty. I adopt Mattli and Slaughter's definition of this concept as "an image of different governmental institutions interacting with one another, with individuals and groups in domestic and transnational society and with supra-national institutions" (Mattli and Slaughter, 2007, 255).

Although Stone Sweet and Brunell conceptualize national courts in a three-tiered hierarchy – lower, intermediate and higher courts – that takes into account more actors than Alter's dual conceptualization – lower and higher courts – the limits of the publicly accessible information only permits the researcher to distinguish references between lower and high courts (Sweet and Brunell, 1998 and Alter, 1996, 471-481). Lower courts are conceptualized as only courts of first instance within national judicial systems. High courts are considered to be any national court that is not a court of first instance. High courts then include appellate courts, constitutional courts and courts of last instance.

Variables

As stated above, the variables considered in the subsequent analysis are drawn from the previously discussed theories of European legal integration as measured by the number of Article 177 references made by each 2004 member state. Thus, the dependent variable being measured in each of the theories is the total number of Article 177 references made by a member state from 2004 to 2010. The independent variables under consideration are the member states' national legal systems, judicial empowerment, publicly perceived legitimacy of each EU institution, and transnational activity. Unfortunately, many of the independent variables identified in the aforementioned theories are not plausible variables for this research project due to time and fiscal constraints, as well as the quantitative and generalizing nature of this project.[2]

Research Design

The research undertaken for this project is modeled on Stone Sweet and Brunell's quantitative analysis of the differences in the number of Article 177 references between the member states of the EU-15 (Sweet and Brunell, 1998). Their comprehensive analysis of various European legal integration

2 The excluded variables discussed in the literature review are the incentives and disincentives for national judges to refer cases to the ECJ, the interests of numerous sub- and supra-national actors and the constraints facing these actors. Through further research, I hope to measure national judges' incentives and disincentives by examining whether judges are appointed or elected to their positions and how appointed judges are chosen for their positions, which will measure the level of political influence in this process. Also, as discussed in my conclusion, a dataset modeled on the one published by Stone Sweet and Brunell needs to be created and kept up-to-date. This dataset would include information on the subject matter of each preliminary reference and the type of litigants involved with each preliminary reference, among other basic information.

theories constructs a sound methodological foundation upon which my own analysis is built. It draws upon different areas of European legal integration theory to create its tests and hypotheses, effectively testing the theoretical literature against empirical data and statistical analyses. It is through these tests that I hope to replicate and expand in order to determine which variables explain the variance in the number of Article 177 references made by those member states that joined the EU in 2004.

The first theory tested is Armstrong's proposal that the type of legal system a member state possesses influences the number of Article 177 references the state will make in any given year (Armstrong, 1998, 155-174). The independent variable tested under this theory is the type of national legal system. To test this theory, all of the 2004 member states were divided into two groups: states with civil law systems and states with common law systems (coded as 1 and 2, respectively) (see Appendix One). , the total numbers of references made between 2004 and 2010 were tallied for each member state. The hypothesis is that states with civil law systems will request more references than those states with common law systems.

The second theory assessed is Alter's version of the judicial empowerment thesis (Alter, 1996, 458-487). The independent variables found here are the number of preliminary references sought by lower courts and the amount of references coming from higher courts for all of the 2004 member states from 2004-2010. According to Alter's theory, the number of Article 177 references from the lower courts should be greater than the number from the higher courts.

Next, the alternate model of judicial empowerment proposed by Mattli and Slaughter is tested. The specific relationship being examined is the effect of the type of national legal system and the amount of competition between national courts on the number of Article 177 references (Mattli and Slaughter, 2007, 77-131). The type of legal system is operationalized as above in my evaluation of Armstrong's theory, and the competition between courts is measured as a function of the number of references made by low and high courts. The hypothesis posited by Mattli and Slaughter's theory is that if the total number of Article 177 references increase as the number of lower court references increase, and if the number of lower court references is greater in member states with civil law systems, then judicial competition and the type of national legal system both directly influence the number of preliminary references produced by a member state.

Fourth, Caldeira and Gibson's theory on the influence of public legitimacy of the ECJ on the total number of Article 177 references is also tested (Caldeira and Gibson, 1995). The independent variable investigated under this theory is publicly perceived legitimacy of the ECJ. It is operationalized by aggregating Eurobarometer data from 2004 to 2010 on the public's trust in the ECJ for each 2004 member state and comparing it to the level of public trust in other EU institutions. The Eurobarometer collects this information as the percentage of the people who answered "tend to trust," "tend to not trust" or "don't know" on the poll (European Commission). The hypothesis derived from Caldeira and Gibson's theory is that if a member state's population perceives the ECJ as legitimate, its number of Article 177 references will increase.

Finally, I evaluate the theory proposed by Stone Sweet and Brunell in their 1998 article: there is a direct correlation between transnational activity and the number of Article 177 references member states solicit (Sweet and Brunell, 1998). As per their article, transnational activity is operationalized as the amount of intra-EU trade and the number of direct actions and regulations passed each year by

the EU.[3] Stone Sweet and Brunell hypothesize that if intra-EU trade and the number of direct actions and regulations increases, then so too does the total number of Article 177 references made by all of the member states from 2004 to 2009.

My research seeks to test the above hypotheses derived from scholarly literature on European legal integration against the actual historical numbers and trends of Article 177 references for specific member states. A core assumption of my research is that states are disaggregate entities consisting of numerous actors, and that these national actors then interact with the international and supranational actors of the ECJ and other international organizations. This assumption directly effects the variables that I have chosen to test. Rather than only testing variables that measure national court to ECJ interactions, such as the number of lower and higher court references from each 2004 member state or the type of national legal system of the member states, I have chosen to include sociological and economic factors such as public opinion data and intra-EU trade measurements. I believe that including factors outside of strictly court-to-court interactions will provide a better analysis of possible factors contributing to the success or failure of European legal integration, as measured by the reference trends of each member state. I have chosen to focus on those member states that joined the EU through the enlargements of 2004 and 2007 due to the lack of scholarly research on the number and trends of the Article 177 references made by these member states, in addition to the time and fiscal constraints of this project.

Data Analysis

To assess Armstrong's theory, a comparison of means test was run, using the total number of Article 177 references from each member state over the period 2004 to 2010 as the dependent variable and the type of legal system (either civil or common law) as the independent variable. Table One shows the results of the comparison of means as created in SPSS. According to this analysis, those member states with civil law legal systems referred an average of 14.63 references between 2004 and 2010, compared to an average of only 1.5 references made by member states with common law systems over the same seven-year period.

These results speak directly to Armstrong's thesis. This analysis supports the above stated hypothesis derived from Armstrong's theory. Since the comparison of means proves that those 2004 member states with civil law legal systems referred over nine times more cases to the ECJ for preliminary ruling than those with common law legal systems, the hypothesis must be accepted that member states with civil law systems will refer more cases to the ECJ under Article 177 than member states with common law systems. Still, this test does not answer, and was not designed to answer, why this variance in the number of preliminary ruling references occurs between member states with differing legal traditions.

On the other hand, Alter's theory of judicial empowerment is not supported by the data collected by the ECJ. This data is presented in Figure One as a bar graph measuring the number of lower and higher court references for each member state from 2004 to 2009. The actual values for each year per member state are displayed in Table Two. Figure One signifies that Alter's theory only holds in two of

3 For a full discussion of how these variables were originally operationalized, please see Alec Stone Sweet and Thomas L. Brunell. "The European Court and the National Courts: a Statistical Analysis of Preliminary References, 1961-95" Journal of European Public Policy 5, no. 1 (1998).

the ten 2004 member states (the Czech Republic and Hungary). Thus, the hypothesis derived from Alter's theory of judicial empowerment, that the number of lower court references will be higher than those requested by high courts, must be rejected, at least as it pertains to the 2004 member states as an aggregate entity.

However, the data does suggest that Alter's thesis is valid in certain member states. This result poses a new puzzle for researchers: what conditions are present, or missing, in Hungary and the Czech Republic that cause lower courts to refer more cases under Article 177 than high courts? This is a puzzle worth exploring in the future through in-depth qualitative analyses that could only take place in conjunction with field research.

The alternative brand of judicial empowerment proposed by Mattli and Slaughter is partially represented by the comparison of means test previously discussed under Armstrong's theory (see Table One). Mattli and Slaughter argue that the number of Article 177 references is directly correlated to the type of legal system within a member state. As discussed in consideration of Armstrong's theory, there is a trend for member states with civil law systems to refer more cases, on average, than those with common law systems. This finding supports Mattli and Slaughter's argument, and the researcher accepts the same hypothesis as under Armstrong.

Another component of Mattli and Slaughter's theory is that it is expected that "the relationship between the European Court and the national courts [will] grow tighter over time, measurable in part by increasingly higher levels of art. 177 activity" (Sweet and Brunell, 1998, 69). As Stone Sweet and Brunell did for 1961-1994, I tested this theory by graphing the number of references for all of the 2004 member states over the time period 2004-2010 in Figure Two. The graph illustrates that, indeed, the total number of preliminary references does increase over time.[4] This general trend is further demonstrated through an examination of each member states' annual references, as seen in Figure Three. Therefore, the data suggests that the ECJ and national courts have generally formed a closer relationship over the course of the seven years since the 2004 member states joined the EU.

In order to test the theory advanced by Caldeira and Gibson that as the percentage of the public in each member state who perceives the ECJ as legitimate increases, so too will the number of Article 177 references. I compiled information on the amount of trust each member states' population had in the EU institutions over the seven-year period of 2004-2010 using data collected by the public opinion surveys of the Eurobarometer (European Commission). I then ran bi-variate regressions on the average trust, lack of trust and uncertainty all of the 2004 member states had for the ECJ, Council of Ministers, European Commission and European Parliament between 2004 and 2010.[5] The results of this correlation test are seen in Table Three.

Even though Stone Sweet and Brunell originally tested Caldeira and Gibson's theory using a multivariate regression on diffuse support, population and GDP, this statistical avenue makes little sense for my study for two reasons (Sweet and Brunell, 1998, 76). First, Stone Sweet and Brunell employed the information found in Caldeira and Gibson's index of diffuse support as the data for their diffuse support independent variable (Sweet and Brunell, 1998, 76). Unfortunately, this index only contains

4 Although the sharp decrease in the annual number of references between 2009 and 2010 does not strictly undermine Mattli and Slaughter's thesis, it should be noted and analyzed in conjunction with data from subsequent years, as the information becomes available.

5 The European Central Bank was not considered in my analysis because not all of the countries under consideration are members of the Eurozone.

information for the EU-15 (Caldeira and Gibson, 1995, 358-360). Thus, I had to rely on published Eurobarometer data, which bring the discussion to the second reason why a multivariate regression would not be appropriate in this case. Due to the multi-colinearity of the Eurobarometer polls, any R2 value formulated from this information would be artificially enflamed. In other words, public perception in one year is influenced by public perception the year before, which causes a falsely high percentage of the total number of Article 177 references to be explained by public legitimacy of the ECJ. However, by running a bi-variate regression, it is possible to determine the strength and direction of the relationship between the total number of preliminary references made by the 2004 member states between 2004 and 2010 and public legitimacy of various EU institutions by examining the resulting Pearson's-r for each regression.

As seen in Table Three, the Pearson's correlation value for each of the EU institutions is very close to zero. At best, there is a weak correlation between the total number of Article 177 references and public legitimacy of the EU institutions. Considering the ECJ exclusively, the Pearson correlation of the average percentage of the populations of the 2004 member states that trust the ECJ is -0.143. This indicates that there is a weak, negative relationship between the level of trust the populations of the 2004 member states have in the ECJ and how many references were made to the ECJ by these member states. This result directly contradicts the hypothesis derived from Caldeira and Gibson's theory. Instead of rising public legitimacy of the ECJ (measured as trust in the ECJ) increasing the total number of preliminary references, increased legitimacy actually slightly decreases the number of references. Therefore, the original hypothesis must be rejected.

Unlike the above analyses, the analysis for Stone Sweet and Brunell's transnational activity was completed using two different methods. This is due to the fact that the independent variables used by Stone Sweet and Brunell to measure transnational activity – intra-EU trade levels and the number of directives and regulations published by the EU each year – are on two different levels: intra-EU trade is on a state-by-state level, while directives and regulations measure the EU as a whole on a supra-national level. Hence, I first performed a bi-variate regression with the total amount of intra-EU trade for each 2004 member state as the independent variable and the total number of Article 177 references as the dependent variable (See Table Four). I then graphed the level of total intra-EU trade for the 2004 member states for each year and the number of EU directives and regulations for each year (See Figures Four and Five).

As recorded in Table Four, the Pearson correlation for the total intra-EU trade for the 2004 member states between 2004 and 2009 and the total number of preliminary references made by these same member states over the same time period is 0.340. This signifies that the relationship is fairly weak and positive. A positive relationship matches Stone Sweet and Brunell's hypothesis and findings, but the weak relationship contrasts with the strong correlation they find for the EU-15 (Sweet and Brunell, 1998, 75).

A comparison of Figure Four and Figure Two further indicates that Stone Sweet and Brunell's conclusions may not apply to the 2004 member states. Contrary to what these scholars hypothesize, the aggregate level of intra-EU trade of the 2004 member states (measured as the sum of the trade balances of the 2004 member states for each year in question) decreases between 2004 and 2007, while the total number of Article 177 references increases. However, from 2007 to 2009, the relationship is as predicted by Stone Sweet and Brunell's theory with the number of preliminary ruling references and

total intra-EU trade increasing for the 2004 member states. On account of this incongruity between the patterns of the two variables, it is not possible to positively accept or reject the first portion of Stone Sweet and Brunell's hypothesis as it pertains to the 2004 member states.

Nonetheless, a side-by-side examination of Figure Two and Figure Four supports the second clause of Stone Sweet and Brunell's hypothesis. Figure Four depicts the annual number of EU directives and regulations. When compared to Figure Two, a clear relationship emerges. For the years 2004 to 2008, both the number of Article 177 references and EU directives and regulations rise. But in 2008, the number of directives and regulations decreases dramatically while Article 177 references continue to increase. Although, as noted in the previous analysis of Mattli and Slaughter's judicial empowerment theory, the number of preliminary references does drop significantly between 2009 and 2010. Unfortunately, data on the number of EU directives and regulations published in 2010 has not yet been made available to the public. So, it is impossible to tell whether the decrease in the number of preliminary ruling references is a response to the fall in the number of directives and regulations in the previous year.

In light of the limited information available (and the restricted modes of analysis thus available to the researcher), it is not possible to make a definitive decision about the relationship between the annual number of directives and regulations produced by the EU and the annual total number of Article 177 references made by the 2004 member states. Yet there is enough evidence to tentatively argue that intra-EU trade does not directly influence annual totals of preliminary reference rulings as much as the annual number of EU directives and regulations within the 2004 member states. In other words, based on my research, the level of intra-EU trade does not necessarily have a strong positive correlation with the number of preliminary references in the 2004 member states, but it is likely that the number of EU directives and regulations has a strong direct correlation with the number of Article 177 references made by the 2004 member states. Furthermore, it is likely that the number of EU directives and regulations has a direct correlation with the number of Article 177 references made by the 2004 member states, though the strength of that direct correlation is not yet possible to determine given the lack of data currently available.

Conclusion

The purpose of this research project was two-fold. First, as my research question states, it sought to determine what factors explain the variance in the number of preliminary ruling references made by the member states that joined the EU through the 2004 enlargement. This was accomplished through quantitative analyses of five of the leading theories of European legal integration modeled on the analyses published in 1995 and 1998 by Stone Sweet and Brunell (Sweet and Brunell, 1998). Second, it sought to determine if the theories that held true in the EU-15 remain valid or proved false for the 2004 enlargement states by comparing Stone Sweet and Brunell's findings for the EU-15 with the conclusions drawn in this project about the 2004 member states.

In regard to the latter of these two purposes, only two out of five conclusions matched those found for the EU-15. In both Stone Sweet and Brunell's analysis and my own research, Alter's theory of judicial empowerment was proven false (Sweet and Brunell, 1998). However, Mattli and Slaughter's version of judicial empowerment as a direct, positive correlation of the national legal system and level of judicial competition within member states on the number of preliminary ruling references made by a

member states is demonstrated to be valid for both the EU-15 and the 2004 member states.

One theory where my findings differ from Stone Sweet and Brunell's conclusions is Armstrong's proposition that the type of national legal system will influence the number of Article 177 references. Stone Sweet and Brunell state that disparities in the type of national judicial systems in the EU-15 "have no systematic effect that is measurable by [their] data." (Sweet and Brunell, 1998, 73). Yet my analysis states that over nine times the number of references originate in member states with civil law systems (see Table One). Instead, I found that there is a very weak, negative relationship between public legitimacy of the EU institutions, not simply the ECJ, and the total number of Article 177 references. It is important to point out, though, that I was not able to run a multivariate regression like Stone Sweet and Brunell did to test this theory because the data used by Stone Sweet and Brunell is not available for the 2004 member states (Sweet and Brunell, 1998). The Eurobarometer data I utilized is not viable for a multivariate regression due to its property of co-linearity. This difference in data selection and analysis is a plausible explanation for our opposite conclusions. Further data collection using Gibson and Cladeira's index of diffuse support is needed before a difference in methodology and data can be ruled out as an explanation for the contradicting findings.

Finally, Stone Sweet and Brunell "found broad support" for their own transnational activity theory in the EU-15 (Sweet and Brunell, 1998, 95). Unfortunately, detailed data needs to be collected on the annual number of EU directives and regulations before it will be possible for me to positively say that the number of EU directives and regulations have a positive, direct influence on how many requests for preliminary rulings a 2004 member state makes. Also, there is the simple matter of time. The trends discussed and analyzed by Stone Sweet and Brunell occur over a period of thirty-four years, whereas my data only covers seven years. As time goes on and more data is collected in greater detail, I will be able to definitively conclude whether Stone Sweet and Brunell's transnational activity theory applies to the 2004 member states. At this time, my findings suggest that the amount of intra-EU trade a member state partakes in has little bearing on the annual number of Article 177 references made by that member state, while the annual number of directives and regulations published by the EU has a direct, positive causal relationship with the total annual number of preliminary references made by the 2004 member states.

Beyond the future research agendas already discussed, it would be incredibly beneficial for future researchers to focus on enhancing the dataset on preliminary references already started by Stone Sweet and Brunell (Sweet and Brunell, 2007). In particular, a systematic categorization of preliminary references by member state, year of referral, year of completion, subject matter, court of referral and name and type of the litigants (i.e. NGO, member state, individual, lobbying group) needs to be accomplished. Such a dataset, if it were kept up to date, would provide scholars with irreplaceable information that would reveal new dynamics of European legal integration and aid researchers in the testing of previously established theories in new situations.

For example, I could not test the theory that the interests of numerous actors, including national and ECJ judges, domestic and European politicians, NGOs and private businesses, that affect the number of Article 177 references because the cross-referenced data is not available publicly, and the only dataset that does this only has incomplete data (at best) after 1998 (Sweet and Brunell, 2007). With the continuing enlargement of the EU – geographically, politically, legally and economically – such a dataset would be invaluable to researchers.

In summary, I conclude that the variance in Article 177 references in the 2004 member states is not explained by the same factors as in the EU-15. I found extensive support for Armstrong's proposal and Mattli and Slaughter's version of judicial empowerment. Nevertheless, Alter's judicial empowerment thesis and Gibson and Caldeira's emphasis on public legitimacy for the ECJ fall flat against my findings. Stone Sweet and Brunell's transnational activity theory produces mixed results within my analysis. In order to discover the full explanation for the differing trends in Article 177 references within the 2004 member states, a dataset that categorizes preliminary references by numerous variables, including member state, subject matter and the type of litigants, needs to be created for the EU-27. Overall, the type of national legal system found within a member state, competition between national judges and the number of directives and regulations produced by the EU each year partially explain the inconsistency in Article 177 references requested by the member states that joined the EU through the 2004 enlargement.

It is my hope that the findings presented in this research will cause European legal scholars to rethink their approach of treating legal integration in each member state as a set, formulated process, and cause scholars and policymakers alike to develop a method and mode of legal integration for new member states that takes into account the individual needs and problems of each new member states' legal system and its relation to its citizens. Because of the unique nature of the European Union's legal system and its interaction with the national legal systems of its member states, I would caution scholars in applying the details of this research to legal relations within other quasi-supranational entities, such as the United Nations or the Association of Southeast Asian Nations. However, I would encourage legal scholars of other areas of the world to utilize the key point of my research: legal integration is not an uniform process for all member states, and, thus, supranational entities need to develop programs for legal integration taking into account the unique nature of each state's legal system and socio-political relations.

Appendix One: Code Book for Quantitative Analyses Done in SPSS

Country	Country Code
Cyprus	1
the CzechRepublic	2
Estonia	3
Hungary	4
Latvia	5
Lithuania	6
Malta	7
Poland	8
Slovakia	9
Slovenia	10

Miscellaneous
- 999 = data not available
- 998 = data missing

Independent Variable One: Armstrong, What Type of Legal System Did the Country Have Upon Entering the EU?
- Coded as: LegalSys
    - 1 = civil law
    - 2 = common law

Independent Variable Two: Alter, Judicial Empowerment 1, How many Art. 177 references were made by each level of the national courts for each member state?
- Lower courts coded as: LowerCourtRefs
- High courts coded as: HighCourtRefs

Independent Variable Three: Mattli and Slaughter, Judicial Empowerment 2, How many Art. 177 references were made by each member state since 2004?
- 2004 Coded as: TotRefs04
- 2005 Coded as: TotRefs05
- 2006 Coded as: TotRefs06
- 2007 Coded as: TotRefs07
- 2008 Coded as: TotRefs08
- 2009 Coded as: TotRefs09
- 2010 Coded as: TotRefs10
- Total Number of References for 2004-2010: TotRefs0410

Independent Variable Four: Caldeira and Gibson, Publicly perceived legitimacy of the national courts and ECJ,

- **How much trust does each population place in the ECJ?**
    - Percentage that answered "Tend to trust" coded as:
        - TrustECJ04
        - TrustECJ05
        - TrustECJ06
        - TrustECJ07
        - TrustECJ08
        - TrustECJ09
        - TrustECJ10
        - Average: AvgTrustECJ0410
    - Percentage that answered "Tend not to trust" coded as:
        - NotTrustECJ04
        - NotTrustECJ05
        - NotTrustECJ06
        - NotTrustECJ07
        - NotTrustECJ08
        - NotTrustECJ09
        - NotTrustECJ10
        - Average: AvgNotTrustECJ0410
    - Pecentage that answered "Don't Know" coded as:
        - DKECJ04
        - DKECJ05
        - DKECJ06
        - DKECJ07
        - DKECJ08
        - DKECJ09
        - DKECJ10
        - Average: AvgDKECJ0410
    - **How much trust does each population place in other EU institutions?**
    - **European Commission**
        - Percentage that answered "Tend to trust" coded as:
            - TrustEuroComm04
            - TrustEuroComm05
            - TrustEuroComm06
            - TrustEuroComm07
            - TrustEuroComm08
            - TrustEuroComm09
            - TrustEuroComm10
            - Average: AvgTrustEuroComm0410

- Percentage that answered "Tend not to trust" coded as:
    - NotTrustEuroComm04
    - NotTrustEuroComm05
    - NotTrustEuroComm06
    - NotTrustEuroComm07
    - NotTrustEuroComm08
    - NotTrustEuroComm09
    - NotTrustEuroComm10
    - Average: AvgNotTrustEuroComm0410

- Pecentage that answered "Don't Know" coded as:
    - DKEuroComm04
    - DKEuroComm05
    - DKEuroComm06
    - DKEuroComm07
    - DKEuroComm08
    - DKEuroComm09
    - DKEuroComm10
    - Average: AvgDKEuroComm0410

- **Council of Ministers**
    - Percentage that answered "Tend to trust" coded as:
        TrustCounofMin04
        TrustCounofMin05
        TrustCounofMin06
        TrustCounofMin07
        TrustCounofMin08
        TrustCounofMin09
        TrustCounofMin10
        Average: AvgTrustCounofMin0410
    - Percentage that answered "Tend not to trust" coded as:
        - NotTrustCounofMin04
        - NotTrustCounofMin05
        - NotTrustCounofMin06
        - NotTrustCounofMin07
        - NotTrustCounofMin08
        - NotTrustCounofMin09
        - NotTrustCounofMin10
        - Average: AvgNotTrustCounofMin0410
    - Pecentage that answered "Don't Know" coded as:
        - DKCounofMin04
        - DKCounofMin05

- DKCounofMin06
- DKCounofMin07
- DKCounofMin08
- DKCounofMin09
- DKCounofMin10
- Average: AvgDKCounofMin0410

- **European Parliament**
  - Percentage that answered "Tend to trust" coded as:
    - TrustEP04
    - TrustEP05
    - TrustEP06
    - TrustEP07
    - TrustEP08
    - TrustEP09
    - TrustEP10
    - Average: AvgTrustEP0410

  - Percentage that answered "Tend not to trust" coded as:
    - NotTrustEP04
    - NotTrustEP05
    - NotTrustEP06
    - NotTrustEP07
    - NotTrustEP08
    - NotTrustEP09
    - NotTrustEP10
    - Average: AvgNotTrustEP0410

  - Pecentage that answered "Don't Know" coded as:
    - DKEP04
    - DKEP05
    - DKEP06
    - DKEP07
    - DKEP08
    - DKEP09
    - DKEP10
    - Average: AvgDKEP0410

How aware of the ECJ is each population?(Percentage that answered "Yes")
- Coded as:
  - AwareECJ04
  - AwareECJ05
  - AwareECJ06

- AwareECJ07
- AwareECJ08
- AwareECJ09
- AwareECJ10
- Average: AvgAwareECJ0410

Independent Variable Five: De la Mare, Rule of Non-Inquiry, How many Art. 177 references were made by the member states on topics that they are required to refer?

- Coded as: MustRefer

Independent Variable Five: Stone Sweet and Brunell, Transnational Activity,
How much intra-EU trade does each country partake in, in each year?

- Coded as:
  - EUTrade04
  - EUTrade05
  - EUTrade06
  - EUTrade07
  - EUTrade08
  - EUTrade09
  - Total intra-EU trade for 2004-2009: TotEUTrade0409

How many directives and regulations has the EU produced in each year?

- Coded as:
  - EUdirecreg04
  EUdirecreg05
  EUdirecreg06
  EUdirecreg07
  EUdirecreg08
  EUdirecreg09

How many Art. 177 references were made by each member state since 2004?

- Coded as above

Independent Variable Six: MemberState Interests, KarenAlter, What subjects were referred to the ECJ most?

"In our analyses of the data, we commonly aggregated references that fell with the same legal domain, by constructing a system of ordinal variables that would…sort all references…into a meta…category. These meta-categories are marked with the variable label on the first line of any sub-grouping of subject matters, and continue until that group is set off by a blank space…

Taken together, the meta-categories contain roughly 90% of total subject matters invoked in refer-

ences. For each reference, coded entries consist of a number between 0 and 5, with 0 indicated that none fothe claims fall within the subject matter denoted by that metacategory, and 1 through 5 indicating how many different claims fall within a single metacategory of EC law…In other words, a metacategory is a counting variable.

These counting variables are as follows:

- Agriculture (labelled "agri")
- Free Movement of Goods (labelled "freemove")
- Competition and Dumping (labelled "external")
- External Relations (labelled "external")
- Social Security (labelled "socsec")
- Social Provisions (labelled "socprov")
- Environment (labelled "environ")
- Establishment (labelled "estab")
- Free Movement of Workers and Persons (labelled "movework")
- Taxation (labelled "tax")
- Transportation (labelled "transprt")
- Commercial Policy (labelled "compolc")
- Approximation of Laws (labelled "apprxlaw")"1

Appendix Two: Tables and Figures Table One: Results of Comparison of Means Test for Armstrong's Theory (Information used to categorize member states' legal systems found at: United States Central Intelligence Agency)

Case Processing Summary						
	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
TotRefs0410 * LegalSys	10	90.9%	1	9.1%	11	100.0%

Report			
TotRefs0410			
LegalSys	Mean	N	Std. Deviation
1	14.63	8	11.563
2	1.50	2	.707
Total	12.00	10	11.605

Table Two: The Number of Lower and High Court References for Each of the 2004 Member States (European Court of Justice, 2010)

Country	Lower Court References	High Court References
Cyprus	0	2
the Czech Republic	9	6
Estonia	5	1
Hungary	27	6
Latvia	1	9
Lithuania	3	7
Malta	1	0
Poland	15	17
Slovakia	3	5
Slovenia	3	0

Table Three: Bi-Variate Regressions Results from SPSS on the Average Trust, Lack of Trust and Uncertainty (2004-2010) (European Commission)

Correlations					
		TotRefs0410	AvgTrustECJ0410	AvgNotTrustECJ0410	AvgDKECJ0410
TotRefs0410	Pearson Correlation	1	-.143	-.094	.063
	Sig. (2-tailed)		.693	.796	.862
	N	10	10	10	10
AvgTrustECJ0410	Pearson Correlation	-.143	1	.178	-.813**
	Sig. (2-tailed)	.693		.623	.004
	N	10	10	10	10
AvgNotTrustECJ0410	Pearson Correlation	-.094	.178	1	-.694*
	Sig. (2-tailed)	.796	.623		.026
	N	10	10	10	10
AvgDKECJ0410	Pearson Correlation	.063	-.813**	-.694*	1
	Sig. (2-tailed)	.862	.004	.026	
	N	10	10	10	10
AvgTrustEuroComm0410	Pearson Correlation	-.032	.805**	-.053	-.594
	Sig. (2-tailed)	.930	.005	.884	.070
	N	10	10	10	10
AvgNotTrustEuroComm0410	Pearson Correlation	.092	-.157	.918**	-.442
	Sig. (2-tailed)	.800	.665	.000	.201
	N	10	10	10	10
AvgDKEuroComm0410	Pearson Correlation	-.038	-.614	-.650*	.878**
	Sig. (2-tailed)	.918	.059	.042	.001
	N	10	10	10	10
AvgTrustEP0410	Pearson Correlation	.000	.752*	-.031	-.577
	Sig. (2-tailed)	1.000	.012	.932	.080
	N	10	10	10	10
AvgNotTrustEP0410	Pearson Correlation	.076	-.199	.888**	-.394
	Sig. (2-tailed)	.834	.581	.001	.261
	N	10	10	10	10
AvgDKEP0410	Pearson Correlation	-.051	-.585	-.603	.838**
	Sig. (2-tailed)	.889	.076	.065	.002
	N	10	10	10	10
AvgTrustCounofMin0410	Pearson Correlation	-.210	.855**	.100	-.688*

Correlations					
		AvgTrustEuroComm0410	AvgNotTrustEuroComm0410	AvgDKEuroComm0410	AvgTrustEP0410
TotRefs0410	Pearson Correlation	-.032	.092	-.038	.000
	Sig. (2-tailed)	.930	.800	.918	1.000
	N	10	10	10	10
AvgTrustECJ0410	Pearson Correlation	.805**	-.157	-.614	.752*
	Sig. (2-tailed)	.005	.665	.059	.012
	N	10	10	10	10
AvgNotTrustECJ0410	Pearson Correlation	-.053	.918**	-.650*	-.031
	Sig. (2-tailed)	.884	.000	.042	.932
	N	10	10	10	10
AvgDKECJ0410	Pearson Correlation	-.594	-.442	.878**	-.577
	Sig. (2-tailed)	.070	.201	.001	.080
	N	10	10	10	10
AvgTrustEuroComm0410	Pearson Correlation	1	-.289	-.685*	.974**
	Sig. (2-tailed)		.417	.029	.000
	N	10	10	10	10
AvgNotTrustEuroComm0410	Pearson Correlation	-.289	1	-.499	-.244
	Sig. (2-tailed)	.417		.142	.496
	N	10	10	10	10
AvgDKEuroComm0410	Pearson Correlation	-.685*	-.499	1	-.694*
	Sig. (2-tailed)	.029	.142		.026
	N	10	10	10	10
AvgTrustEP0410	Pearson Correlation	.974**	-.244	-.694*	1
	Sig. (2-tailed)	.000	.496	.026	
	N	10	10	10	10
AvgNotTrustEP0410	Pearson Correlation	-.343	.986**	-.442	-.327
	Sig. (2-tailed)	.333	.000	.201	.356
	N	10	10	10	10
AvgDKEP0410	Pearson Correlation	-.702*	-.466	.990**	-.739*
	Sig. (2-tailed)	.024	.175	.000	.015
	N	10	10	10	10
AvgTrustCounofMin0410	Pearson Correlation	.965**	-.193	-.727*	.945**
	Sig. (2-tailed)	.000	.593	.017	.000
	N	10	10	10	10
AvgNotTrustCounofMin0410	Pearson Correlation	-.251	.997**	-.531	-.206
	N	10	10	10	10
AvgDKCounofMin0410	Pearson Correlation	-.630	-.533	.977**	-.642*
	Sig. (2-tailed)	.051	.112	.000	.045
	N	10	10	10	10

Correlations				
		AvgNotTrustEP0410	AvgDKEP0410	AvgTrustCounofMin0410
TotRefs0410	Pearson Correlation	.076	-.051	-.210
	Sig. (2-tailed)	.834	.889	.561
	N	10	10	10
AvgTrustECJ0410	Pearson Correlation	-.199	-.585	.855**
	Sig. (2-tailed)	.581	.076	.002
	N	10	10	10
AvgNotTrustECJ0410	Pearson Correlation	.888**	-.603	.100
	Sig. (2-tailed)	.001	.065	.784
	N	10	10	10
AvgDKECJ0410	Pearson Correlation	-.394	.838**	-.688*
	Sig. (2-tailed)	.261	.002	.028
	N	10	10	10
AvgTrustEuroComm0410	Pearson Correlation	-.343	-.702*	.965**
	Sig. (2-tailed)	.333	.024	.000
	N	10	10	10
AvgNotTrustEuroComm0410	Pearson Correlation	.986**	-.466	-.193
	Sig. (2-tailed)	.000	.175	.593
	N	10	10	10
AvgDKEuroComm0410	Pearson Correlation	-.442	.990**	-.727*
	Sig. (2-tailed)	.201	.000	.017
	N	10	10	10
AvgTrustEP0410	Pearson Correlation	-.327	-.739*	.945**
	Sig. (2-tailed)	.356	.015	.000
	N	10	10	10
AvgNotTrustEP0410	Pearson Correlation	1	-.394	-.256
	Sig. (2-tailed)		.260	.475
	N	10	10	10
AvgDKEP0410	Pearson Correlation	-.394	1	-.736*
	Sig. (2-tailed)	.260		.015
	N	10	10	10
AvgTrustCounofMin0410	Pearson Correlation	-.256	-.736*	1
	Sig. (2-tailed)	.475	.015	
	N	10	10	10
AvgNotTrustCounofMin0410	Pearson Correlation	.982**	-.499	-.158
	Sig. (2-tailed)	.000	.142	.663
	N	10	10	10
AvgDKCounofMin0410	Pearson Correlation	-.472	.961**	-.724*
	Sig. (2-tailed)	.168	.000	.018

Correlations			
		AvgNotTrustCounofMin0410	AvgDKCounofMin0410
TotRefs0410	Pearson Correlation	.112	.097
	Sig. (2-tailed)	.759	.790
	N	10	10
AvgTrustECJ0410	Pearson Correlation	-.108	-.651*
	Sig. (2-tailed)	.767	.041
	N	10	10
AvgNotTrustECJ0410	Pearson Correlation	.927**	-.733*
	Sig. (2-tailed)	.000	.016
	N	10	10
AvgDKECJ0410	Pearson Correlation	-.487	.924**
	Sig. (2-tailed)	.154	.000
	N	10	10
AvgTrustEuroComm0410	Pearson Correlation	-.251	-.630
	Sig. (2-tailed)	.484	.051
	N	10	10
AvgNotTrustEuroComm0410	Pearson Correlation	.997**	-.533
	Sig. (2-tailed)	.000	.112
	N	10	10
AvgDKEuroComm0410	Pearson Correlation	-.531	.977**
	Sig. (2-tailed)	.114	.000
	N	10	10
AvgTrustEP0410	Pearson Correlation	-.206	-.642*
	Sig. (2-tailed)	.568	.045
	N	10	10
AvgNotTrustEP0410	Pearson Correlation	.982**	-.472
	Sig. (2-tailed)	.000	.168
	N	10	10
AvgDKEP0410	Pearson Correlation	-.499	.961**
	Sig. (2-tailed)	.142	.000
	N	10	10
AvgTrustCounofMin0410	Pearson Correlation	-.158	-.724*
	Sig. (2-tailed)	.663	.018
	N	10	10
AvgNotTrustCounofMin0410	Pearson Correlation	1	-.566
	Sig. (2-tailed)		.088
	N	10	10
AvgDKCounofMin0410	Pearson Correlation	-.566	1
	Sig. (2-tailed)	.088	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table Four: Bi-Variate Regression Results from SPSS on Total Intra-EU Trade and Number of Article 177 References (2004-2009) (Eurostat, 2010)

Correlations

		TotEUTrade0409	TotRefs0410
TotEUTrade0409	Pearson Correlation	1	.337
	Sig. (2-tailed)		.341
	N	10	10
TotRefs0410	Pearson Correlation	.337	1
	Sig. (2-tailed)	.341	
	N	10	10

Figure One (European Court of Justice, 2010)

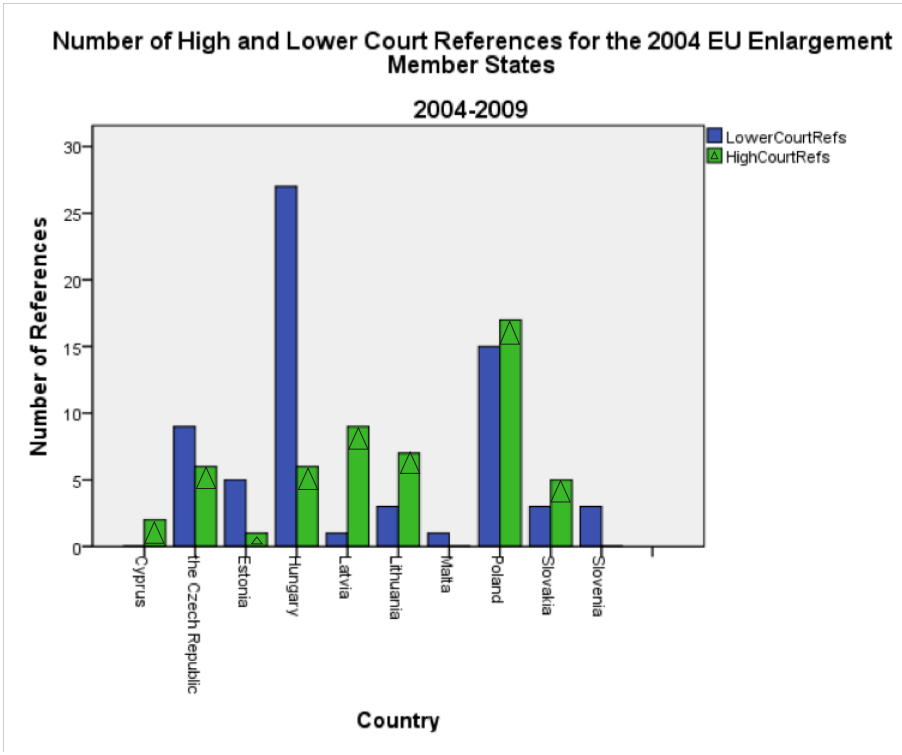


Figure Two (European Court of Justice, 2010)

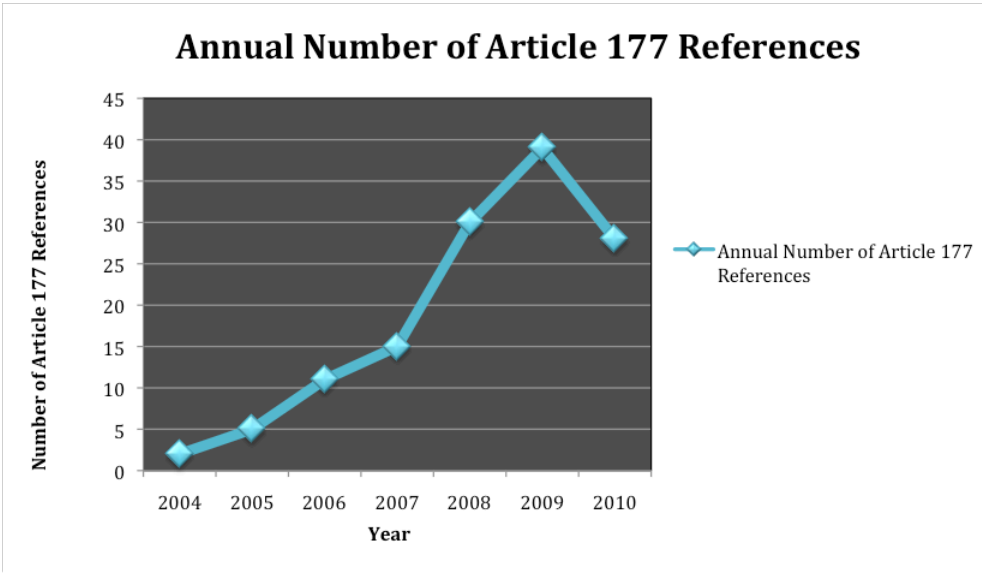


Figure Three (European Court of Justice, 2010):

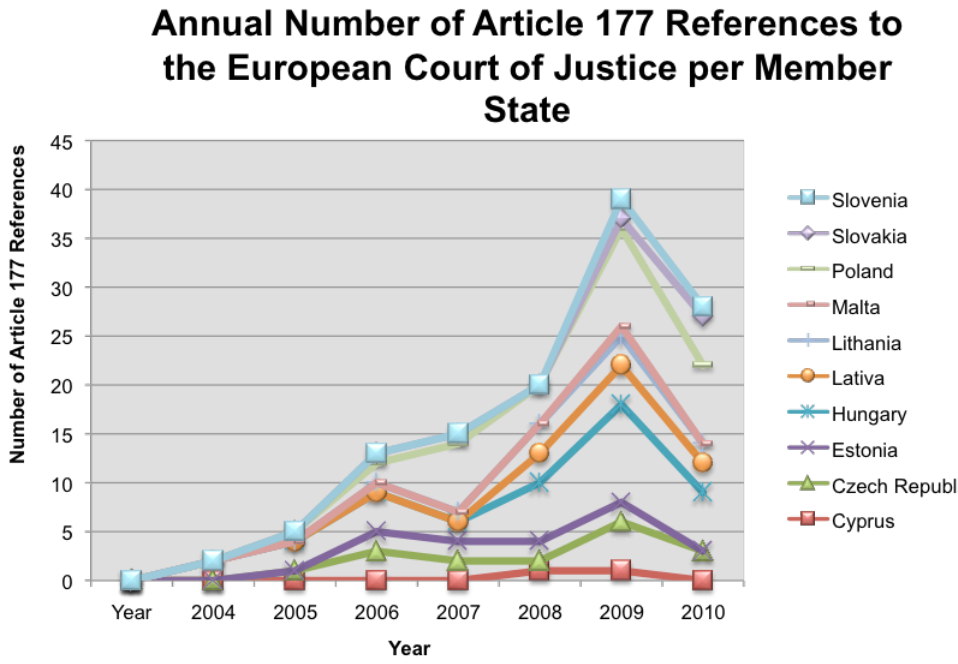
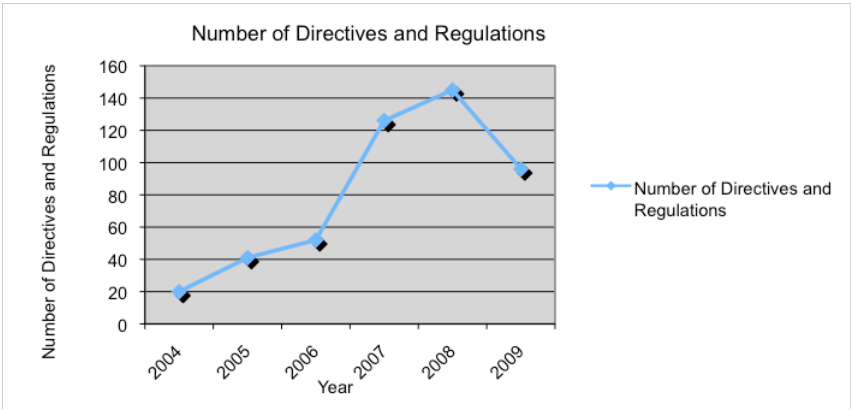


Figure Four (Eurostat, 2010)



Bibliography

Alter, Karen J. 1996. "The European Court's political power" West European Politics 19 (1996): 458-487.

Armstrong, Kenneth A. 1998. "Legal Integration: Theorizing the Legal Dimension of European Integration," Journal of Common Market Studies 36 (June): 155-174.

Caldeira, Gregory A. and James L. Gibson. 1995. "The Legitimacy of the Court of Justice in the European Union: Models of Institutional Support," The American Political Science Review 89 (1995): 356-376.

Cini, Michelle. 2010. "Intergovernmentalism.," In European Union Politics, edited by Michelle Cini and Nieves Pérez-Solórzano Borragán, 86-103. New York, NY: Oxford University Press.

Egan, Michelle, Neill Nugent and William E. Paterson. 2010. "Introduction: Researching the European Union." In Research Agendas in EU Studies: Stalking the Elephant, edited by Michelle Egan, Neill Nugent and William E. Paterson, 1-13. London, UK: Palgrave Macmillan.

European Commission. "Eurobarometer Interactive Search System," European Commission. http://ec.europa.eu/public_opinion/cf/index_en.cfm (accessed April 9-17, 2011).

European Court of Justice. 2010. "2010 Annual Report of the Court of Justice," European Court of Justice. http://curia.europa.eu/jcms/jcms/Jo2_11670/ (Accessed April 9-17, 2011).

Eurostat. 2010. "External and intra-EU trade – statistical yearbook," European Commission.

Garrett, Geoffrey. 1995. "The Politics of Legal Integration in the European Union," International Organization 49 (Winter), 171-181.

Garret, Garrett, R. Daniel Kelemen, Heiner Schulz. 1998. "The European Court of Justice, National Governments, and Legal Integration in the European Union" International Organization 52 (Winter), 149-176.

Golub, Jonathan. 1996. "The politics of judicial discretion: Rethinking the interaction between national courts and the European court of justice" West European Politics 19 (April), 360-385.

Jensen, Carsten Strøby. 2010. "Neo-functionalism." In European Union Politics, edited by Michelle Cini and Nieves Pérez-Solórzano Borragán, 176-188. New York, NY: Oxford University Press.

Mattli, Walter and Anne-Marie Slaughter. 1995. "Law and Politics in the European Union: A Reply to Garrett," International Organization 49 (Winter), 183-190.

Mattli, Walter and Anne-Marie Slaughter. 1998. "Revisiting the European Court of Justice," International Organization 52, 1 (1998), p. 177-209

Mattli, Walter and Anne-Marie Slaughter. 2007. "The Role of National Courts in the Process of European Integration: Accounting for Judicial Preferences and Constraints." In The European Courts and National Courts – Doctrine and Jurisprudence: Legal Change in its Social Context, edited by Anne-Marie Slaughter, Alec Stone Sweet and Joseph Weiler, 253-276. Oxford, UK: Hart University Press.

Stone Sweet, Alec and Thomas L. Brunell. 1998. "The European Court and the national courts: a statistical analysis of preliminary references, 1961-95," Journal of European Public Policy 5, 66-97.

Stone Sweet, Alec and Thomas L. Brunell. 2007. Data Set on Preliminary References in EC Law, NEWGOV Project, Robert Schuman Centre, European University Institute (San Domenico di Fiesole, Italy).

The United States Central Intelligence Agency, "The CIA World Factbook," The United States Central Intelligence Agency. https://www.cia.gov/library/publications/the-world-factbook/fields/2100.html?countryName=Afghanistan&countryCode=af&regionCode=sas&#af (Accessed April 9-17, 2011).

KARL MARX AND THE FAIR TRADE CHOCOLATE INDUSTRY IN THE IVORY COAST

Caitlin McGonnigal

Abstract

The research completed aimed to show that the idea of fair trade, using the example of goals for the chocolate industry of the Ivory Coast, can be described as an example of the economic ideal which Karl Marx imagined. By comparing specific topics discussed by Karl Marx's philosophy on capitalism and its failures, and the ideals purported by fair trade organizations and partners, parallels can be made. This analysis showed that Karl Marx's philosophy coordinates with fair trade ideals in topics such as the importance of history, the eradication of child labor and environmental degradation, and community involvement. However, the theories differ slightly on the topic of self-sufficiency. This study shows the current importance of Marx's theories and that his philosophy is far from being determined irrelevant, even in the current modern and capitalistic world. Furthermore, in light of recent criticisms of globalization due to current economic and financial turmoil worldwide, the idea of fair trade and its correlations with Marxist philosophy is becoming even more relevant.

Introduction and Methodology

Karl Marx is one of the greatest thinkers of all time, and many argue that his philosophy still has a place in today's world. One area where his thoughts remain relevant is in the discourse over free trade vs. fair trade. Fair trade attempts to address issues inherent in capitalism and globalization, something which is being increasingly mentioned in light of recent events. This paper will be an exploratory literature review discussing Karl Marx's critique of capitalism and writings about fair trade goals. Because "Marxism" today has metamorphosed from Marx's original theories, the research completed will ground itself in the basic philosophical ideas of Karl Marx.

The assumption in doing this study is that fair trade goals are valid and that their policies are working. This paper attempts to remain somewhat removed from the politics of fair trade and of whether it has been successful, although these points are important and will be mentioned briefly. This paper will investigate whether the current campaign for fair trade in the chocolate industry of the Ivory Coast has the potential to be an example of Karl Marx's hope for capitalism.

Defining Terms and Ideas

Fundamentally, free trade is focused on the modernization theory, in response to fair trade's claims which follow the dependency theory Free trade will be taken as a very simple definition of

completely open trade according to David Ricardo's principle of comparative advantage and specialization. Free trade contains no trade barriers such as tariffs, quotas, and sanctions. Free trade also focuses on the evaluation of production through cost-benefit analysis, attempting to produce the most at the lowest cost. The fair trade theory is distantly based on Marxist principles, such as dependency and exploitation (Eisenberg 2005). Fair trade takes a step further than free trade in enabling production and helping members in the fair trade network "survive and compete on the international market" (Fridell 2006, 11). This is the most important goal, even if it disables comparative advantage or the ability to achieve the lowest cost possible in production. Fair trade's main goal is to increase partnership, dialogue, transparency and respect while also searching for better trading conditions ("The chocolate industry" 2011). The Fairtrade Labeling Organization (FLO) is the larger organization of 25 other non-profits which label products "produced under the conditions of no child labor, environmental sustainability, strict labor standards…and various regulations to ensure democratic participation in small-producer cooperatives and unionized plantations" (Fridell 2006, 10). The hope of fair trade initiatives is to create conditions for production which ensure protection of the laborer and tackles other evils of capitalist production. Marxism will be defined using its very basic principles such as "an economy which would be neither centrally planned nor market governed". According to this model, "decisions on the overall allocation of resources…would be set by representative assemblies local, regional, and national" levels (Eagleton 2011, 25). It focuses more on the bottom-up approach in deciding how and what resources are allocated.

Certain aspects of Marx's ideals have been chosen in order to develop a well-rounded description of Marx's critique of capitalism. Capitalism has given the world admirable concepts such as the middle class, liberty, democracy, civil rights, feminism, scientific progress, and many other things; however, Marx still finds room to grow His critique of capitalism includes the discussion of political impotence due to capitalism, the exploitation of the labor class, wealth inequalities, and other issues (Eagleton 2011). It is "the most searching, rigorous comprehensive critique of its kind ever to be launched," and will be translated into what Marx hoped for capitalism and the global economy, relating this hope to current fair trade debates (2). Four aspects have been chosen as a focus: Marx's explanation of the importance of history, importance of self-sufficiency, exploitation, and the development of and participation in community. These areas delve into key aspects of Marx's economic ideas and give an overall image of his critique of capitalism. It should be made clear that this is one author's view and application of Marx's theories and that most of the theories are titled and grouped through this author's interpretation.

Some Existing Problems in the Chocolate Industry

The issues of the how the chocolate industry functions and abuses worker rights, mainly in the phases of growing and trading cocoa beans are some which can be easily solved. Currently, middlemen take advantage of small farmers by offering to buy their crops below the actual value of the cocoa beans. Due to lack of communication and access to information, farmers take the price they are offered). Middlemen also use distorted scales in order to convince farmers that their crops weigh less getting more crops at the already low prices. These low prices may not even cover cost of inputs in production and basic family needs such as costly fertilizer and medicine. Fourteen million people in

the developing world depend on cocoa production as their livelihood and in the Ivory Coast and Ghana 90% of people rely on cocoa for their primary income, showing how many people are possibly being taken advantage of. Around the world, 90% of cocoa is grown and harvested on small farms of 4.8 hectares owned by farmers who do not have access to more stable markets because small farms usually only produces .5 tons a year compared to the 10 tons required by major agricultural markets. Instead, this advantage is reaped by the owners of large plantations of 40 hectares or more who make up 5% of production ("Products: Cocoa" 2011). "Growers in West Africa are likely to receive just 3.5-6.4% of the final value of a chocolate bar," compared to the 56-70% that the manufacturers receive and the 12-17% retailers receive (Goodyear 2011).

Although the largest chocolate corporations are spread around the Western World, 70% of the world's cocoa beans are grown in West Africa, around 40% coming from the Ivory Coast alone Cocoa plantations in the Ivory Coast are one of the worst examples of issues in the cocoa industry. Although the working age is 18 in the Ivory Coast, there are still children working in the fields "wielding machetes, handling pesticides, and carrying heavy loads" (Parenti 2008). A number of these children are trafficked across borders, from Burkina Faso and Mali into the Ivory Coast (North 2011). The children, usually boys, between 11 and 16 years old, are bought by plantation owners and work up to 12 hours a day, receiving no salary or education . Girls are purchased to be housemaids, sometimes in addition to doing work on the plantation (Goodrich 2009). Besides doing dangerous work, these children are provided minimal food and shelter and sometimes beaten or threatened in order to make them stay (North 2011). It is presumed that 109,000 children are working in the Ivory Coast on cocoa farms, 10,000 who are victims of trafficking ("Cocoa Campaign" 2011). An estimated 800,000 children are believed to be working in the cocoa industry all over the world (Hawksley 2011).

Poverty is the driving force behind child labor in this area. The traffickers rely on the "economic desperation" of the children from different areas and therefore promise a good job for them to make money for their families (North, 2011). In the areas of the plantations, more than 40% of the Ivory Coast's population lives under the poverty line (Hawksley 2011). This problem could be managed by enforcing labor laws and combined with ways to help the population of people involved in the issue avoid such extreme circumstances.

Literature Review

There is a range of literature used to create an image of both Marx's philosophy and the goals of fair trade. In order to shape Marx's hope for capitalism, his original readings were used. Capital and The Communist Manifesto were read for basic knowledge. This offered the four topics which are used later to analyze fair trade goals. Other books which give basic explanations of Marx's principles and their effects are also used extensively. This group of literature offers basic economic explanations for his principles as well as an idealistic view of what Marx hoped his philosophy would accomplish and how it can still be used presently. In Terry Eagleton's Why Marx Was Right there is a foreboding nature, criticizing those who have come to view Marx as irrelevant or incorrect (Eagleton 2011). This gives an interesting perspective from which to understand perhaps what Marx truly desired, separating his theories from their later evolutions, such as Marxism or Leninism.

In order to gain a better understanding of fair trade ideals, a basic history of fair trade and its groundings are explained in Gavin Fridell's article and through organization websites such as those

of Fairtrade Labeling Organization, Equal Exchange, and others. Fridell's (2006) article explores the theoretical backing of the fair trade community, focusing on its neo-liberalist twist . Fair trade organization websites give information about their foundations and mission statements, as well as specific fair trade policies, goals, and their successes. Blog posts written by members associated with fair trade organizations or with a fair trade organization's website are also used to decipher the main goals and worries about the issues in the chocolate industry (Goodrich 2009). Organization briefs from certain conferences or pertaining to certain issues give more in-depth discussions about the plans for problems and policies being implemented.

Raynolds and Wilkinson (2007) explain that fair trade is a movement which developed out of changing dynamics in the agrofood industry, "broader struggles over the regulation of global markets…[and] the renegotiation of power," and increasing social movements which target the private sector rather than states. One important aspect they acknowledge is the increasing role of social movements which focus on industry and the market rather than state action, categorized as Global Social Justice initiatives. Global Social Justice initiatives aim to make change in labor in reference to social, cultural, and ecological rights (Raynolds & Wilkinson 2007). This piece offers greater background on fair trade and fits it into the broader changes in views of globalization.

A study done by Bob Doherty and Sophi Tranchell (2005) seeks to analyze fair trade policies and their effects in a case study of a fair trade chocolate company in West Africa, the Day Chocolate Company. The study found that income and social premiums have increased from year to year in the case of the Kuapa members in the overall Day Chocolate Company. The Kuapa members have gained access to shares in a UK company and have more expertise concerning the trading chain of their product. Other outcomes include increased female participation, the creation of a credit union, and new schools that have been constructed presumably from funds from the Kuapa membership in the fair trade model (Doherty & Tranchell 2005). To gain an outsider perspective on the fair trade vs. free trade debate and its effects, articles from mainly economic-focused newspapers such as CNNMoney and Forbes are used to explain how the goals of the fair trade movement are being implemented and the reaction of that implementation.

The majority of this paper is written under the assumption that what fair trade describes as faults of capitalism are facts and that what fair trade hopes to accomplish is beneficial for the farmers it targets. This assumption is used in order to draw parallels between Marx's theories, displaying Marx's relevance and what could be a refreshing of his point of view in world politics. However, there are many in the academic world who find fault with both fair trade goals and what they accomplish, as well as with Marx's own goals and theories. Critics are concerned over fair trade's true "fairness" because a "few extra pennies" will not help farmers dramatically and will instead trap them in a cycle of dependence on foreign demand and support from fair trade organizations (O'Neill 2007). There are also criticisms of attempting to apply labor codes meant for large corporations to small, family-owned farms and criticisms of the lack of discussion over the ideational aspect of the implementations of the fair trade standards, putting the neutrality of oversight bodies in fair trade into question (Blowfield 2003). Also, there is increasing, yet controversial, evidence to show that globalization and capitalistic ideals in markets tend to elevate people out of poverty (Bhagwati 2007). This evidence shows the positive aspects of capitalism and globalization; however, they do ignore some of the negative externalities, and does not suggest ways to adjust them.

Comparison of Marx's Principles and Fair Trade Goals

The goals of the fair trade movement are outlined by a group of different fair trade organizations. The basic standards which allow a product to be considered a fair trade product are in three different categories of development: social, economic, and environmental. The test for these standards includes a requirement of improvement over time. The main standards include minimum price requirements including a premium added onto the price to invest in other development projects, a focus on beneficial relationships between trading partners, better financial help for producers, and social and environmental responsibility ("Aims of Fairtrade Standards" 2011). The Fairtrade Foundation, underneath FLO, has created two types of programs, one for smaller farmers and one focusing on hired labor in order to address fair trade issues. There are also other standards specifically for traders including partial payment in advance to producers, traceability and record-keeping systems, and contracts to "allow for long-term planning and sustainable production practices" ("Fairtrade Standards" 2011). Related to these basic goals for the cocoa industry, there are programs and ideas of fair trade organizations which reflect ideas Marx developed.

Importance of History

Marx revered David Ricardo and other economists but found weaknesses in their arguments for capitalism in that they disregarded history, instead viewing the economy as developing through the laws of nature. Other economists could not "grasp that their own science had emerged and developed only under these determinate conditions" (Pilling 1980, 13). Marx emphasized the need to discuss how relations in the political economy are produced through a historical development, which other economists ignore (Pilling 1980). This Hegelian concept of passing down concepts from previous thinkers and adding onto these in order to create the idea and scope of the political economy is unique (Pilling 1980). This creates a structure which can be altered and simply constructed by thinkers and by circumstance, and one which might be eternally on the verge of change.

Similarly, the importance of history is a crucial understanding in international development. A country does not find itself in a state of poverty due to only conditions that cannot be altered and conditions which are irrelevant of history. Also, the structure of markets and business transactions is not an unalterable concept. The original champions of fair trade recognized this concept and wished to set up an alternative trading system based on regulation, constructing a new view of economic relations (Fridell 2006). Proponents of fair trade "know that there are other ways of doing business" and emphasize "higher prices, pre-harvest credit, environmental sustainability and direct relationships with small-scale farmer co-operatives, [and] is a far more ethical and sustainable business model. (Goodrich 2009). As Marx believes in his models which show that "what and how we produce could be determined by social need rather than private profit" (Eagleton 2011, 25), the fair trade goals state that "people, not profits, are at the heart of our businesses" (Goodrich 2009). Through increased cooperation, business transactions can be altered to benefit more than just a few "capitalists" (Marx 1932).

Self-Sufficiency

One of the most central goals of Fairtrade includes the premium added onto products which are approved for the label of fair trade. This premium is added into a communal fund for the laborers and

owners of the farms to decide what the money should go towards. The only stipulation is that it must go to a project that improves economic, social, or environmental conditions in the community ("The Fairtrade premium" 2011). For example, since 1993, Kuapa members in West Africa have received close to $2 million in fairtrade premiums which have gone to projects as well as to extra income for farmers (Doherty & Tranchell 2005). In Marx's world, "decisions about…allocation would…be devolved downwards to regional and local levels" (Eagleton 2011, 25). Similar to this, what to do with the premium money is decided upon democratically by a group of local farmers and is usually invested in social aspects like education or healthcare, farm improvements to increase individual farm yield or processing facilities to increase income ("The Fairtrade premium" 2011). This extra money gives the farmers a fund from which they can draw in order to better their community and economy in the long run.

Marx describes briefly in "Capital" that a country or group of people "begin to distinguish themselves from animals as soon as they begin to produce the means of life…In producing their means of life, men indirectly produce their material life" (Marx 1932, 8). Marx focuses on the need for a group of people or a country to be self-sufficient first and foremost, and not depend on another (Marx 1932). The Fairtrade model does not focus on making countries self-sufficient, especially concerning their possible dependency on things such as food aid (Thurow & Kilman 2009). This is especially true for the Ivory Coast because the crop focused on is a cash crop, cocoa, rather than a food crop. However, what the Fairtrade premium does provide is a chance to use the profit from sales of cocoa on personal necessities, while the premium is used for longer-term development projects "The Fairtrade premium" 2011). For example, the premium money has been used in Ghana to build water boreholes, public toilets, and two day-care centers as well as help fund a mobile health program which offers medical services to multiple communities. In the Ivory Coast, the premium has already been used to build village schools where parents' fees contribute to teacher salaries ("Fair Trade and Cocoa" 2011).

This premium could instead be viewed as an alternative route to self-sufficiency. The premium creates a way to focus on the future, while individuals and their families can still focus on the here-and-now. Marx's quote "[i]t is not consciousness that determines life, but life that determines consciousness" concisely explains that once people do not have to focus on needs for life, they can focus on themselves as intellectual beings (Marx 1932, 10). The fair trade premium works to push the cocoa producers to a point where they are able to embrace this step.

Expulsion of Exploitation of Child Labor and the Environment

Marx described the structure of capitalism as "economic classes and the exploitation of one class by another inherently and eternally" (Eastman 1932, xiv). It always seems to be that "labour power…[is] always bound up with certain social relations" such as the stronger social class "own[ing] and control[ling] the means of production, while another may find itself exploited by it" (Eagleton 2011, 37). This means that one social class has more power over modes of production, including that of the labor class, and chooses to exploit that power to reap greater benefits. Eagleton gives an excellent example to describe exploitation: "But to point out that some people are destitute while others are prosperous is rather like claiming that the world contains both detectives and criminals. So it does; but this obscures the truth that there are detectives because there are criminals…" (emphasis in text) (11). There are several types of exploitation in the chocolate industry, especially concerning the Ivory

Coast, including exploitation of the environment and of child labor. Besides the premium discussed previously, which can be directed to assist in programs to minimize the effects of exploitation, there are other ways which can help the situation.

Similar to Marx's view of capitalism, companies in the chocolate industry are indirectly profiting from the exploitation rising out of the industry (North 2011). The largest corporations in the chocolate industry are Kraft (USA), Mars (USA), Nestle (Switzerland), Ferrerro Group (Italy), Hershey (USA), and Chocoladefabriken Lindt & Sprüngli (Switzerland) ("The Chocolate Industry" 2011). Known corporations such as these control together 85% of the exports from the Ivory Coast, showing their large presence in the region (North 2011). These companies are involved enough to change the organization and practices of the production processes of those from which they get their cocoa beans from Cadbury has been informed of the issue of slavery and child labor for quite some time, as they were caught in a scandal of relying on slave plantations for production as early as between 1900-1907 (North 2011). Yet, no real movement towards better production practices has been made by these corporations.

Fairtrade, and other similar organizations, are choosing to tackle the issue of child labor by focusing on relieving poverty because it fuels the need for and supply of child labor. "Regular audits are designed to detect instances of child labor and major breaches of Fairtrade standards on the worst forms of child labor can result in suspension of the producer group along with corrective actions." The point of this technique is to offer producers the ability to learn and not impose "harsh punitive measures" which might only increase poverty and drive more children into labor. Additionally, strengthening the position of producers in supply chains, usually by cutting out middlemen, helps eliminate the need for child labor ("Fair Trade and Cocoa: Commodity Briefing" 2011). Paul Rice, from Trans-Fair USA, states that the organizations programs "sometimes eliminate as many as 5 middlemen: a local buyer, miller, exporter, shipper, and importer, allows farmers to deal directly with the American wholesaler" (Alsever 2006).

In the case of environmental exploitation, Marx states that "a nation, or even all simultaneously existing societies together, are not the owners of the globe" and that "they must hand it down to succeeding generations in an improved condition" (Eagleton 2011, 229). Eagleton (2011) also mentions that Marx was certainly "aware of the conflict between the short-term capitalist exploitation of natural resources and longer-term sustainable production" (229). Marx saw the environmental exploitation capitalism displays and wished to change that cycle (Eagleton 2011).

Similarly, fair trade organizations and others have tried to initiate production processes that focus on sustainability. Fair trade focuses on the "minimized and safe use of agrochemicals, proper and safe management of waste, maintenance of soil fertility and water resources and no use of genetically modified organisms." In order to receive the Fairtrade label one does not need to be organically certified, but it is rewarded with the setting of a higher Fairtrade minimum price ("Aims of Fairtrade Standards" 2011). Additionally, the Fairtrade organization is currently working on having other nations notice and help curb the damaging effects of climate change on small farmers in regions where Fairtrade products are grown ("Climate Change and Fair Trade" 2011).

Focus on Community Involvement

Marx's final concept explored in its relation to fair trade ideals is that of the focus on community involvement and each individual's place in society. Marx (1932) understood the concept of comparative advantage and "the inequality of individual endowment" (6) but he promoted the idea that every person should help to produce and build society. "Within a cooperative society…the labor of the individual becomes, no longer in a roundabout way, but directly, a component of the total labor" (Marx 1932, 5). People do not simply work for themselves, but rather work in unison with the rest of society in order to produce better. Another of Marx's most famous concepts is that the price of a good is equal to the value added by a worker's labor: "The same quantity of labor which he has given society in one form, he receives back in another" (5). Whatever an individual inputs into the overall production and wellbeing of society, he shall receive that much in return, in equal amounts. However, Marx also believes that each should receive "according to his needs;" this means that society as a whole must provide for each and every person, building a strong community of production to support the population (7).

As described earlier, the fair trade organizations do not look at each farm individually and try to help; rather, they set up a network of small producers in a region, creating a sense of community between the farmers. The "small family farms [are] organized in cooperatives or associations which [producers] own and govern" ("Products: Cocoa" 2011). For example, the Kavokiva Cocoa Co-operative was established in the Ivory Coast by 600 farmers in 1999, and is known for its good administrative structure, quality of cocoa, and services to farmers ("Kavokiva Cocoa Co-operative, Cote d'lvoire" 2011). The Kuapa Kokoo group succeeded in helping the network of members as well as creating benefits for non-members as well, such as building schools and providing medical services using medical students it sponsored (Doherty & Tranchell 2005). One of the key aspects of the premium system of fair trade is the fact that the group of local farmers democratically chooses together what the premium should be used for ("The Fairtrade premium" 2011). The community is better able to view what resources they need and can therefore find ways to achieve goals of getting those resources.

This sense of community is further built by creating a larger network worldwide of people who produce, buy, sell, and appreciate fair trade good ("Principles for the Fair Trade Federation Members" 2011). The group of 25 non-profit organizations underneath the overall labeling system of Fairtrade Labeling Organization need to work together in order to accomplish goals ("What we do" 2011). By spreading the word about fair trade it is more able to become successful and move to other locations where it can help small farmers ("Principles for the Fair Trade Federation Members" 2011). The more the fair trade movement is noticed that more power it has to involve other movers in the industry, such as the chocolate producing corporations and the governments of countries where cocoa is produced.

Conclusion

The goals of the Fairtrade Labeling Organization and other organizations are to help build a new production process and market structure. This paper focused on four of Marx's ideals to analyze the changes that fair trade organizations wish to install to help small farmers and laborers in the Ivory Coast. Both Marx and the fair trade goals focus on the importance of history and understand that market structures are not arising out of natural tendencies but rather are created and can therefore

any social or political growth can occur, while fair trade tries to spread the profits gained from trade across different sectors of development. Creating a production system rid of exploitation, especially of child labor and environmental degradation, is a topic found in fair trade goals similar to how Marx viewed capitalist structure and the changes that needed to be made. The final ideal discussing community involvement can be seen in both Marx and fair trade goals because fair trade organizations work hard to create a network of small farmers to make decisions at the local level, as well as a larger global network of those who support and believe in fair trade.

As briefly mentioned before, Marx's theories have essentially lost out to arguments for capitalism which highlight its ability to generate growth more rapidly. Marx's ideas of production, and trade, and growth decreases poverty (Bhagwati 2007). However, due to recent global challenges there has been an increased criticism of the globalized and capitalistic structure of the world economy. For example, the European financial crisis has brought up concerns over financial integration and the inherent risk involved (Mayer-Hohdahl 2012). Furthermore, the argument that globalization increases inequality has gained more traction in recent years (Rampell 2011). Perhaps fair trade is an example of what will be an increasing relevance of Marx's economic theories. Fair trade's parallels to Marx's ideas and its increased discussion and popularity certainly holds implications for the international economy itself.

Fair trade ideas certainly have the potential to be useful and helpful for the small farmers that they are directed towards. Still, fair trade labeled cocoa only captures 0.1% share of the market ("The Chocolate Industry" 2011). The question then becomes why it is not working and making significant global change. Erik Kain (2011) from Forbes magazine is concerned that the higher premium prices only "lead consumers with more purchasing power to buy fair trade goods while most consumers stick to cheaper brands. Fair trade might draw another parallel to Marx's theories in that many believe it to be unsuccessful at helping those it tries to target. Some argue that fair trade labeling and fair trade products create a cycle where farmers are trapped and dependent on the U.S. or other developed countries buying their goods. The movement ignores key elements of development such as mechanization and industrialization (O'Neill 2007) and there has been little effort into incorporating "Southern organizations" in the setting of standards and goals (Blowfield 2003). Others state that the "few extra pennies a day" from premium priced fair trade products can't really make a remarkable change in the lives of the farmers it aims to affect (O'Neill 2007). Blowfield (2003) critiques the fair trade assumption that small producers have little power in the value chain of a product, whereas in his research he saw that "small-holders are significant" in certain commodities that fair trade targets. There are still other criticisms of the concept of fair trade as well. The research in this paper does not attempt to tackle the controversy over fair trade, rather it has shown that fair trade organization goals and initiatives align with many key changes that Karl Marx wanted to see in capitalism and can be seen as a rekindling of his ideas.

Bibliography

Alsever, Jennifer. 2006. "Fair Prices for Farmers: Simple Idea, Complex Reality." New York Times, March 19. Accessed October 2011. http://www.nytimes.com/2006/03/19/business/yourmoney/19fair.htm.

Bhagwati, Jagdish. 2007. In Defense of Globalization. Oxford: Oxford University Press.

Blowfield, Mick. 2003. "Ethical Supply Chains in the Cocoa, Coffee, and Tea Industries." Greener Management International. Greenleaf Publishing.

Doherty, Bob & Sophi Tranchell. July 2005. "New Thinking in International Trade? A Case Study of The Day Chocolate Company." Sustainable Development 13: 3, 166-176.

Eagleton, Terry. 2011. Why Marx Was Right. New Haven: Yale University Press.

Eastman, Max. 1932. "Introduction." Capital and Other Writings of Karl Marx. The Modern Library of the World's Best Books.

Fairtrade Foundation. 2011. "Fair Trade and Cocoa: Commodity Briefing." Fairtrade Foundation Website. Accessed October 2011.

Fairtrade Foundation. "Fairtrade standards." Fairtrade Foundation Website. Accessed October 2011. http://www.fairtrade.org.uk/what_is_fairtrade/fairtrade_certification_and_the_fairtrademark/fairtrade_standards.aspx. http://www.fairtrade.org.uk/includes/documents/cm docs/2011/C/Cocoa%20Briefing%0FINAL%208Sept11.pdf.

Fairtrade Foundation. "Kavokiva Cocoa Co-operative, Cote d'lvoire." Fairtrade Foundation Website. Accessed October 2011. http://www.fairtrade.org.uk/producers/cacao/kavokiva_cocoa_cooperative_cote_divoire2.aspx.

Fairtrade Foundation."The Fairtrade premium." Fairtrade Foundation Website. Accessed October 2011. http://www.fairtrade.org.uk/what_is_fairtrade/fairtrade_certification_and_the_fairtrademark/the_fairtrade_premium.aspx.

Fairtrade International. "Aims of Fairtrade Standards." Fairtrade International Website. Accessed October 2011. http://www.fairtrade.net/aims_of_fairtrade_standards.html.

Fairtrade International. "Climate Change and Fair Trade: Why Is It Time to Make the Links? "Climate Change Position Paper. Fairtrade International Website. Accessed October 2011. http://www.fairtrade.net/fileadmin/user_upload/content/2009/resources/2010-04_Climate_Change_and_Fairtrade_Position_Paper.pdf.

Fairtrade International."Products: Cocoa." Fairtrade International Website. Accessed October2011. http://www.fairtrade.net/cocoa.html.

Fairtrade International. "What we do." Fairtrade International Website. Accessed October 2011. http://www.fairtrade.net/what_we_do.html.

Fair Trade Federation. "Principles for the Fair Trade Federation Members." Fair Trade Federation Website. Accessed October 2011. http://www.fairtradefederation.org/ht/d/sp/d/sp/i/8447/pid/8447.

Goodrich, Dary. 2009. "Profiting From Child Trafficking." Small Farmers, Big Change Website. Accessed October 2011. http://smallfarmersbigchange.coop/2009/08/13/profiting-fromchild-trafficking/.

Goodyear, Dave. 2011. "Chocolate in meltdown." Fairtrade Foundation Blog. Accessed October 2011. http://fairtradeblog.tumblr.com/post/9419780630/chocolate-in-meltdown.

Hawksley, Humphrey. 2011. "Ivory Coast cocoa farms child labour: Little change." BBC News, November 10. Accessed October 2011. http://www.bbc.co.uk/news/world-africa- 15681986.

International Cocoa Organization. "The Chocolate Industry." International Cocoa Organization Website. Accessed October 2011. http://www.icco.org/about-cocoa/chocolatindustry.html.

International Labor Rights Forum. "Cocoa Campaign." International Labor Rights Forum Website. Accessed October 2011. http://www.ilrf.org/stop-child-labor/cocoa-campaign.

Kain, Erik. 2011."Is your Halloween candy the product of child labor?" Forbes Magazine, October 17. Accessed October 2011. http://www.forbes.com/sites/erikkain/2011/10/17/is-child-labor going-into-your-halloween-candy/.

Marx, Karl, 1932. Originally published 1867. Capital and Other Writings of Karl Marx. The Modern Library of the World's Best Books.

Marx, Karl and Friedrich Engels, The Communist Manifesto.

Mayer-Hohdahl, Alexandra. 2012. "Crisis-battered Europe debates greater integration." Business Recorder, October 9. Accessed October 2012. http://www.brecorder.com/articles-letters/187/1246113/.

North, Rodney. 2011. "Child Labor in the Cocoa Industry." Equal Exchange Website. October 2011. http://www.equalexchange.coop/child-labor-in-the-cocoa-industry.

O'Neill, Brendan. 2007. "How fair is Fairtrade?" BBCNews, March 7. Accessed October 2012. http://news.bbc.co.uk/2/hi/uk_news/magazine/6426417.stm.

Parenti, Christian. 2008. "Chocolate's bittersweet economy." CNNMoney, February 15. Accessed October 2011. http://money.cnn.com/2008/01/24/news/international/chocolate_bittersweet.fortune.

Pilling, Geoffrey. 1980. Marx's Capital: Philosophy and political economy. Boston: Routledge & Kegen Paul.

Rampell, Catherine. 2011. "Inequality Rising Across the Developed World." The New York Times, Economix Blog, May 3. Accessed October 2012. http://economix.blogs.nytimes.com/2011/05/03/inequality-rising-across-the-developedworld/.

Raynolds, Laura T. & John Wilkinson. 2007. "Fair Trade in the agriculture and food sector." Fair Trade: The Challenges of Transforming Globalization. New York: Routlegde .

Thurow, Roger & Scott Kilman. 2009. Enough. United States: Public Affairs Publishing.

Wheen, Frances. 2000. Karl Marx: A Life. New York: W.W. Norton & Company, Inc.

THE EDUCATIONAL GENDER GAP IN LATIN AMERICA: WHY SOME GIRLS DO NOT ATTEND SCHOOL

Elise Roberts

Abstract

Girl's education is universally recognized in the International Development community as an important aspect of development. Educating a woman has a significant impact on her opportunities and her community as a whole. Despite the many positive effects of educating girls, girls attend school at a lower rate than boys, creating a gender gap in education. My question is, what causes this gender gap in education? To study this phenomenon, I created four categories of causes: patriarchal factors, family factors, structural factors and governmental financial investment. A number of proxy variables were used to study these qualitative variables in a quantitative manner. I analyzed these variables through four case studies in Latin America: Guatemala, Belize, Mexico and Peru. Using Mill's Indirect Method of Difference, I evaluate which variables show significant causation of the educational gender gap. After this analysis, I conclude that patriarchal society and family factors have the biggest causational effect on the gender gap, while governmental financial investment and structural factors do not cause the gap. This has significant policy implications in the international education world, as many international organizations firmly believe that an increase in financial investment in education is the answer to closing the educational gender gap.

Introduction

The Educational Gender Gap in Latin America: Why Some Girls Do Not Attend School

International Organizations, NGOs, and governments worldwide are questioning why girls attend school at a lower rate than boys in some countries. Education of both girls and boys is universally acknowledged in the development community as a "driver of economic growth and social well-being" (VanBalkom 2011) and is viewed by many as "a basic human right" (Leach 1998). The effect of educating girls, in particular, who have historically been denied access to formal education, has staggeringly positive effects for the individuals, their families, and society as a whole. As argued by Rankin and Aytac, "educating girls boosts family income and social status, and leads to women's higher earnings and occupational mobility"(Rankin 2006). Educating a woman even affects her overall health, giving her "greater fertility control and life expectancy and lower levels of infant mortality"(Rankin 2006). This positive outcome from educating a woman encourages countries to close the educational gender gap.

Since the first International Conference on Public Education in 1934, governments have come together to make international commitments to increase the accessibility of education (Vaishnav 2005). The most recent international commitments to be established were the Millennium Development Goals [MDGs], which placed both universal primary education and gender equality as the two top

priorities for the development world to be attained by 2015. In order to achieve these goals, the MDGs "have singled out investments in schooling as a top priority for developing-country governments as well as for international donor assistance" (Blanc 1996). The general consensus made at these conferences is that developing countries and donor countries need to financially invest in the education system in order to close the educational gender gap (Blanc 1996).

Governmental financial investment may be what the numerous international governmental conferences on education have concluded can close the gender gap, but it does not tell the whole story. On a more micro level, there are several aspects that governmental financial investment in education does not affect. For instance, some factors that could possibly inhibit a girl from attending school include the size of her family, educational attainment of her mother and the amount of patriarchy in society. Additionally, factors such as the adolescent fertility rate, indigenous identification, and living in a rural setting could also affect a girl's likelihood of attending school. This paper seeks to analyze which factors are the most significant causes of the educational gender gap in Latin America.

Literature Review on the Causes of the Educational Gender Gap

After reviewing the literature, I found there are four major factors that keep girls out of the classroom in developing countries, the first and most influential of which is family influence. A girl's education can be hindered by a variety of familial factors, including: low socio-economic status, birth order, familial allocation of resources, the number of children in the family, and low education level of the mother. Second, patriarchal ideals, religion, and traditional family values all discourage families from valuing a daughter's education. In addition, the structural factors of fear of ethnic and gender violence keep girls from attending school. Indigenous women are particularly vulnerable to this type of violence, which further limits their ability to attend school. Third are additional structural factors, such as division of labor and lack of schools, which also have a profound influence on girl's education. Finally, tied to the idea of lack of schools is low governmental financial investment is considered a hindrance to girl's education.

Poverty is the most serious barrier to a girl's education (Leach 1998). Almost every research project I came across cited socio-economic status and other factors within the family structure that inhibit girl's attendance in school. A current phenomenon that particularly prevents educational gender equality is the common family practice of selective education (Rankin 2006). Leach describes this phenomenon in families of low socio-economic status,

Where parents cannot afford to send all of their children to school, boys are inevitably given priority, as future breadwinners. Girls are kept at home to look after younger children, cook and clean, and sometimes help the mother in farming or market trading. (Leach 1998)

This is a frequent occurrence all over the globe, and is most common in large families living in poverty. Older girls are particularly vulnerable to selective education, as being at the top of the birth order depletes family resources due to the presence of younger siblings (Rankin 2006). Families that do not have adequate access to childcare force older girls to stay home from school to care for their younger siblings.

The number of children in a family, or sibsize, is a big determinant of educational attainment. In Steelman's review of literature on educational attainment, he concluded that "the overall effect of sibling size on educational attainment was larger than that of other family characteristics, for example,

paternal occupational characteristics" (Steelman 2002). Naturally, "large families must stretch resources -both material and nonmaterial- across more children, thus reducing the overall amount of schooling that children receive" (Rankin 2006). However, Ono argues that the decision of who goes to school is not only based on the number of children in a family, but also the gender composition of the children. If a family structure places a higher value on the education of sons, "then family resources will likewise be allocated" towards sons (Ono 2004). Therefore, if a family is large and has several sons, then it is unlikely that the daughters will reach a high level of educational attainment.

In addition to the number of children in a family, the education level of the mother also determines the level of educational attainment the daughter receives. As women advance through their life cycle in their social environment, particularly in patriarchal cultures, their educational aspirations are downgraded. Ono argues "this downward adjustment in educational aspirations is transferred across generations as mothers come to hold lower educational aspirations for their daughters" (Ono 2004). Low educational aspirations for the daughter will discourage the family from investing in her education past the level of her mother. From an economic standpoint, Dussaillant argues "more educated mothers produce children with higher levels of human capital" (Dussaillant 2011). Furthermore, economists find "the effect of mother's education is larger than that of father's, which may reflect that mothers have a greater influence on children or that mother's education is in part proxying for the wealth of the household" (Case 1994). Therefore, if a mother did not attend secondary school, then she will not see the value of sending her daughter to secondary school when she could be at home, helping with household chores. However, there is a lot of variability in how and why families make decisions on who will go to school, which could be considered a weakness of the theories regarding familial factors.

Closely tied to the value that a family places on education are the socio-cultural factors of the family and the community. In patriarchal communities, women are socialized to accept that "the masculine man is one who achieves, who is masterful; the feminine woman is one who underachieves, who defers" (Arnot 1994). Patriarchal societies maintain the idea that women are subordinate to men in every way. An unfortunate result of these "environments can be that daughters become the siblings from whom resources are drained" (Ono 2004). As Ono describes, it is highly likely in patriarchal cultures that families will choose to selectively educate their children in favor of boys. Unfortunately, instead of combating the ideology of female inferiority, schools actually perpetuate it. Schools are "replicating the values of the home and community in terms of undervaluing girl's potential and abilities compared to boys" (Swainson 1995). As a fundamental institution of society, it should not be surprising that schools perpetuate societal norms.

In Islamic countries, religion and traditional family values play a key role in the educational gender gap. "To many religious families in Islamic societies, schools pose a threat to the safety and modesty of their daughters and thus to family honor" (Rankin 2006). Leaving the protection of the home is inherently implied in education, which poses potential threats to a girl's well being. "Also, there is a fear of her getting influenced by the "modern" thoughts that can be taught in the schools and thus becoming rebellious towards the social status quo" (Raza 2010). Families worry that if they send their daughters to school, they will become corrupted by the outside world and give up their traditional family values.

Families also fear that sending their daughters to school could put them at risk of ethnic or gender discrimination. Indigenous women have historically been, and are still today, discriminated against both in denying them access to education and perceived status in society. Not only do these women face discrimination by the government, but the institutionalized inferiority of indigenous women has also translated into prejudice from other ethnic groups.

"Ethnic identity then, which is more symbolically apparent and visible amongst women, is a feature of the structural violence, which does not allow them to participate in the education system for fear of physical attack and/or sexual violence." (King 1999)

The discrimination faced by an indigenous woman based on her ethnicity is compounded by her gender, which makes her more vulnerable to this type of discrimination (King 1999). Women are often subjected to certain types of gendered violence, specifically sexual violence. Indigenous women are particularly vulnerable to sexual violence because "firstly, they do not have recourse to the protection of the legal system and secondly, patriarchal society accepts that as normal" (King 1999). Because of this, it is particularly dangerous to send indigenous daughters to school, leading families to keep their daughters at home in order to protect them. Indigenous discrimination and violence is a profound barrier to education, but this only is relevant if a girl is indigenous, which is a weakness of the theory when generalizing it to all girls.

Fear of structural, cultural and sexual violence against daughters forces the family to create a system of inequality and selectively educate their children. According to research done in Honduras by Centro de Capacitacíon Integral de la Mujer Campesina, language barriers and the risks of traveling to school also make girls vulnerable to violence.

"In rural areas the cultural violence that threatens children who do not speak Spanish, the frequent cases of assault and rape perpetuated against women, and the distances that girls have to walk to school, are reasons why parents fail to register them in school."(King 1999)

It is the fear of what could happen to a girl when she walks to school that holds her back from receiving an education. Structural violence can also indirectly affect girls via the death of her parents, leaving her as the head of the household while still a child (King 1999). El Centro de Promocion y Dessarrollo Poblacional reports that in Peru, there are approximately 3,900 female-run households that are run by women under the age of 15 (King 1999). Having the responsibility of taking care of the household denies girls the opportunity to continue their education. The risks of violence stated here are at the extreme end of the spectrum and is not the case for most families in the world, which is a weakness of this theory.

Along with socio-cultural factors in the girl's environment, economic and structural factors in her community could also affect her attendance in school. Some scholars point "to a new global division of labor that limits job opportunities for women, often relegating them to unskilled and low-paying jobs in the informal sector" (Rankin 2006). These new job opportunities for women do not require a high level of formal education to succeed. In turn, this restricts job opportunities and discourages parents from investing in their daughters' education (Rankin 2006). What this theory does not take into account, however, is the maintenance of local industries at the community level.

An important structural factor that is not to be overlooked is the lack of access to schools. A common phenomenon is that "lack of secondary schools in many developing countries contributes to high drop-out rates at the end of primary school"(Rankin 2006). Rural communities where there

is little educational provision consequently also have the lowest school enrollment rates and largest gender gaps in educational attainment (Leach 1998). In contrast, there is also research that shows "for girls, residence in an urban area increases the likelihood of post primary education" (Rankin 2006). Therefore, it is more likely that a girl in an urban setting will have greater access to school than a girl in a rural setting.

The theory of lack of schools leads to the idea that low governmental financial investment in school infrastructure contributes to the educational gender gap. Therefore, in order to close the educational gender gap, the government should increase investment in the education sector. As argued by education researcher and activist Khandaker Lutful Khaled, "achieving quality education for all will require massive new investment i.e. new teachers, new classrooms and more textbooks, mid day meal, stipend etc. Increased investments from domestic budgets are crucial in this regard" (Khaled 2011). Providing the necessary infrastructure for school to take place requires massive financial investment by governments.

If governmental financial investments were to increase, it is important to know where this money is being spent. A government could show figures that suggest increases in governmental spending in education, but the transparency of where the additional funds were spent may not be shared. Khaled argues that the government "should demystify all allocations in education and should clearly spell out the budgetary linkages/share with education and other departments" (Khaled 2011). This would put pressure on the government to ensure that it is spending the money in a productive way and not simply increasing the salaries of education ministers. A weakness of this theory is that Khaled comes from the position of an education activist and is biased in this regard.

While all of these arguments have validity, some are not applicable to every country in the world. Countries with deeply rooted Islamic traditions are mainly concentrated in the Middle East and North Africa. Familial factors are the most common factors cited in the research across all countries that were studied in the literature. Latin America maintains a highly patriarchal society, which could possibly affect the educational gender gap. The structural variable of indigenous and rural populations lacking of access to school is frequently cited as a significant inhibitor for girl's education all over the world. Finally, governmental financial investment in education directly affects the amount of physical infrastructure available for education. Therefore, I argue that these four factors are the most worthy variables to pursue for this research project.

Research Design

As concluded in the literature review, I found four main categories of factors that affect the educational gender gap: familial factors, patriarchal society, structural factors and governmental financial investment. In comparing these four independent variables, I will determine which factors have the largest effect on the dependent variable, the size of the educational gender gap. The following plan outlines how I will answer my research question of what causes the educational gender gap in Latin America.

Choosing the Case Study Countries

I will evaluate four countries from North, Central and South America and compare how each of the independent variables of familial factors, patriarchal society, structural factors and governmental financial investment differ between the cases. The four countries I have chosen are: Mexico, Guatemala, Belize and Peru. I chose these countries based on their values on the Gender Inequality Index and their percentage of indigenous population:

	High % of Inigenous Population	Low % of Indigenous Population
Low Gender Equality Index	Peru	Mexico
High Gender Equality Index	Guatemala	Belize

By choosing countries in Latin America, I have lowered the chance of confounding variables that could influence the educational gender gap. Each of these four countries has a common religion, official language, political system, geographic location [Western Hemisphere] and history of colonization by the Spanish.

Operationalization

As the factors I have chosen are inherently qualitative, I am using proxy variables to assess each independent variable. Each factor is impossible to assess as a whole without looking at individual variables that contribute to the factor overall. The dependent variable, size of the gender gap, will be measured by a number of different proxy variables as well. To evaluate who is going to school and what the students get out of it, I will include male/female net attendance ratio, male/female youth literacy rate, and the percentage of girls who are out of school. All of the data for these variables comes from UNICEF and UNESCO. To measure how long the students stay in school once they get there, I will use World Bank data on male/female primary school completion rate and male/female persistence to grade 5. I chose male/female net attendance ratio rather than net enrollment ratio, because children can be enrolled in school and just not attend, therefore, the attendance ratio is a better indicator of who goes to school.

The patriarchy variable will be assessed by three measures: the Gender Inequality Index, percentage of female participation in the workforce, and the World Values Survey. The Gender Inequality Index is a measure created by the UN Development Program to assess the level of gender inequality in every country in the world. For this indicator, the closer the index gets to zero, the more gender equality a country maintains, and the closer the index gets to one, the greater inequality is present. The indicator of female participation in the workforce comes from UN Habitat data and showcases the societal investment in women as professionals outside the home. To assess the overall level of patriarchy in each country, I have chosen to use the World Values Survey as a measure of how society values of women as professionals. See the Appendix for the survey questions that were used to gather the information and tables that outline the results for Mexico, Peru and Guatemala. The World Values survey was not given to residents in Belize during the 2005-2008 wave, but was given during the 2010-2012 wave, results of which will be published in 2013.

In examining the level of governmental financial investment in education, I evaluated three proxy variables that demonstrate the level of investment in education. To proxy governmental financial investment, I used the total amount spent on educational spending as a percentage of the entire federal budget and as a percentage of GDP. Data for both of these proxy variables comes from UNESCO. In order to calculate how educational spending is distributed to the students, I used per-student spending as a percentage of GDP per capita, the data for which came from the World Bank Education Statistics.

Familial factors were the most difficult to quantify, as it would be difficult to survey every family on how they allocate funds towards their children's education. To proxy the level of the education of the mother, I used the variable of adult female literacy rate as a percentage of males, which comes from UNICEF data. In addition, I will use the national fertility rate as a measure of how many children are in the family, which I gathered from a variety of different sources, including OECD and UN Habitat. I chose fertility rate rather than average household size, because households commonly include extended family members, such as grandparents and cousins. To take into account the infant mortality rate in analyzing how many are in the family, I will use an adjusted figure for fertility rate, subtracting infant mortality rate from total national fertility rate. Finally, I chose to include the adolescent fertility rate of women aged 15-19, because when girls have a child, they are unlikely to continue attending school.

To assess structural factors that affect the educational gender gap, I used proxy variables concerning the kinds of people that receive educational services. Structural variables on the composition of the population include the percentage of the rural population and the percentage of the population that is in poverty, data for which all came from the World Bank. The percentage of the indigenous population comes from the World Directory of Minorities International.

Hypotheses

The above operationalization helps to analyze the impact the variables have on the educational gender gap. The following hypotheses will be evaluated to discover which has the strongest effect on the educational gender gap:

Hypothesis 1: As the level of gender inequality increases, the gender gap increases.
Hypothesis 2: As governmental financial investment in education increases, the gender gap decreases.
Hypothesis 3: As adjusted fertility rate increases, the gender gap increases.
Hypothesis 4: As adult literacy rate increases, gender gap decreases.
Hypothesis 5: As the indigenous population increases across cases, the gender gap increases.
The evaluation of these hypotheses will reveal which variable has the most significant effect on the educational gender gap.

Methodology

The methodology I used to examine the effect of these variables in Mexico, Guatemala, Belize, and Peru is Mill's Indirect Method of Difference. This method investigates similar cases that have different outcomes on the dependent variable and examine which independent variables have a causal

the Spanish, which "makes the real cause easier to spot" (VanEvera 1997). The indirect method in particular uses a paired comparison to find the variable that has the most causal effect. The following research will compare the values of the operationalized independent variables in each country and how they affect the educational gender gap.

To evaluate the level of the proxy variables, I will use cut-off points to evaluate the level of each factor maintained by the case study. For the gender gap, I will consider a country to have a closed gender gap if the proxy variables differ from males to females from 0% to 3%, and moderate if the values are between 3% and 5%. The gender gap is considered persistent if the proxy variables differ by 5% or greater. For the patriarchy variable, I consider a Gender Inequality Index value below 0.4 to be low, approximately 0.45 to be moderate and 0.5 and above to be high. In regards to governmental financial investment, "according to international benchmark, every government must allocate 20% of national budget for education or spend 6% of GDP in education" (Khaled 2011). Therefore, I will consider a country's investment in education sufficient if the GDP is within two percentage points of 20%, and insufficient if it is below that level. The adjusted fertility rate will use a benchmark value of three children, where a value below three is low and a value above three are high. The adult female literacy rate will use a cut-off value of 88%, where a value above 88% is high and a value below 88% is considered low. Finally, the percentage of the population who identifies as indigenous will use a cut-off value of 30%, where below 30% is low and above 30% is high.

Case Study: Mexico

The Mexican Education system has done much to try to close to educational gender gap in the past few years. Scholars Creighton and Park argue that the "general finding is of a closing gender gap in Mexican educational attainment" due to "six decades of reform in Mexican education" (Creighton 2010). The following proxy variables demonstrate the argument Creighton and Park that the educational gender gap is closed. The net attendance ratio in primary school for males and females are both 97% (UNICEF 2005-2010). Primary school completion rate for males and females are equal at 104% (UNICEF 2005-2010). In addition, the rate of males and females who persist until the end of 5th grade is also equal at 95% (Bank 2010). The percentage of girls who are not in school is a negligible 1% (UNESCO 2008). Finally, the youth literacy rate of males is 99% while the female youth literacy rate is 98%, a difference that could simply be subject to rounding (UNICEF 2005-2010).Therefore, I conclude based on the cut-off point of a 3% difference for proxy variables as well as the analysis made by Creighton and Park, the educational gender gap in Mexico is minimal to non-existent.

Patriarchy Variable

As concluded in the literature review, patriarchal society negatively impacts the view that education is beneficial for girls, and having an unequal society leads to unequal outcomes in education. The Gender Inequality Index for Mexico is at a moderate level at an index of 0.448, based on the moderate cut-off value of 0.45 (UNDP 2011). Labor Force Participation Rate, which indicates how much women are a part of the workforce, is one of the lowest in this study, at 47% (Bank 2010).

The results from the World Values Survey show a moderately favorable view towards gender

equality. As outlined in the appendix, the results illustrate that a majority of society would approve of single mothers, which indicates that Mexican society believes that a woman can make her own decisions about her lifestyle (Moreno 2005-2008). Additionally, a majority of respondents agreed that being a housewife was just as fulfilling as having a career, which could indicate that Mexican society does not see value in educating their daughters at a high level if they could be just as happy being a housewife (Moreno 2005-2008). A majority of respondents disagreed or strongly disagreed with the statements "in general, men are better political leaders than women" as well as "in general, men are better business executives than women," which indicates that Mexican society views men and women as having equal leadership potential (Moreno 2005-2008). Finally, a majority of respondents indicated that a university education is just as important for men as it is for women (Moreno 2005-2008). After analyzing these proxy variables, I have concluded that the level of patriarchy in Mexican society is at a moderate level.

Governmental Financial Investment Variable

The extent to which the government financially invests in the education of its people was operationalized by how much money the government invests through a variety of indicators. The amount the Mexican government spends on education, as a percentage of the total federal budget, is 21.6%, a sufficient level compared to the international benchmark of 20% (UNESCO 2009). This equates to 4.9% of the nation's GDP (UNESCO 2009). Furthermore, the amount that is spent per student as a percent of GDP per capita is 16% (Bank 2010). Compared to the other cases in this study, these are all very high numbers. Therefore, I conclude that Mexico has a high level of governmental financial investment in the education sector.

Family Variable

The family variable uses the following proxy variables to demonstrate the influence of the family on the educational gender gap. Mexico has a high adult female literacy rate as a percentage of male, at 97%, compared to the cut-off value of 88% (UNICEF 2005-2010). This indicates that mothers are educated and are therefore more likely to send their children to school. The proxy variable for sibsize was adjusted fertility rate, and in Mexico I calculated this figure to be an average of 2.096 children per woman, lower than the cut-off value of 3 children per woman (Bank 2010). The adolescent fertility rate of girls aged 15-19, as indicated by number of births per 1000, is 68 teen births per 1000 in Mexico (Bank 2010). The culmination of these proxy variables indicates that the family variable in Mexico has a positive influence on the gender gap.

Structural Variable

Mexico has a small indigenous population at only 13%, compared to the other cases in this study and the cut-off value of 30% (International 2005). Mexico also has a low rural population at 22% relative to the other countries in my research (Bank 2010). The headcount ratio of the rural population, the proportion of the rural population that is considered poor, is 61% (Bank 2010). This indicates that of those who live in rural areas, a majority of them are also in poverty. Finally, the total percentage of the population that lives below the poverty line is 48%, which is large compared to the other cases (CIA 2010). The values of these proxy variables lead me to conclude that the structural variable has a

moderate influence on the educational gender gap in Mexico.

Case Study: Peru

Similar to Mexico, the Peruvian educational system has reached relative gender equality in education. The literacy rates of male and female youth in Peru are equivalent, at a rate of 96% (UNICEF 2005-2010). There is a small difference in the net attendance rate of males and females, 98% and 97%, respectively (UNICEF 2005-2010). There is a gap in the number of males and females who persistence to grade, at 85% and 83%, respectively (Bank 2010). The gap gets just a bit wider when one considers primary completion rate of males and females in Peru, at 90% and 87%, respectively (Bank 2010). Despite these gaps, the percentage of girls who are out of school is only 3%, the cut-off value for the gender gap. Therefore, after assessing these proxy variables, I have concluded that the educational gender gap in Peru exists, but is minimal to moderate in size.

Patriarchy Variable

Peru maintains the lowest Gender Inequality Index of all the cases in this study at a score of 0.415, which I consider close to the cut-off value of 0.4, a moderately low level (UNDP 2011). All of the scores in the rest Latin America hovered at this moderate level around 4.5 and 5.0. The labor force participation rate of women in Peru is a staggering 70%, which is 23% higher than Mexico's low level where just 47% of women participate in the workforce (Bank 2010).

The World Values Survey data exposed some interesting trends in Peru. A majority of respondents said they would disapprove of a woman having a child outside of marriage, which indicates that Peruvian society disapproves of women taking on non-traditional gender roles (Romero 2006). A majority of respondents agreed that being a housewife was just as satisfying as having a job, which could translate into a lack of societal investment in girls' education (Romero 2006). A majority of respondents disagreed or strongly disagreed with the statements "in general, men are better political leaders than women" as well as "in general, men are better business executives than women" which indicates that Peruvian society views men and women as having equal leadership potential (Romero 2006). Finally, a large majority of Peruvians thought that a university education was just as important for men as it was women (Romero 2006). Based on these proxy variables, I argue that there is a moderately low level of patriarchy in Peru.

Government Financial Investment Variable

The Peruvian government invests very little in the education of its children when compared to Mexico. The amount the Peruvian government spends on education is 16% of total expenditure, which is not within 2% of the international benchmark of 20%, which I therefore consider to be low (UNESCO 2009). This translates into just 2.6% of Peru's GDP (UNESCO 2009). The per-student amount that is spent equates to just 8% of GDP per capita, half of what Mexico spends per student (Bank 2010). Considering all of these factors together, I have concluded that the Peruvian government's financial investment in education to be low.

Family Variable

As described in the literature review, the composition of the family and education of the mother play significant roles in predicting the education level of a daughter. The adult female literacy rate is 89%, which is close to the cut-off value of 88%, which I will consider moderately high (UNICEF 2005-2010). The adjusted national fertility rate in Peru is at a rate of 2.986 children per mother, which is just under the cut-off value of three children (Bank 2010). Finally, the adolescent fertility rate of girls aged 15-19 is 51 births per 1000, which is 17 births less than Mexico (Bank 2010). These proxy variables lead me to conclude that the family variable in Peru has a moderately positive influence on the gender gap.

Structural Variable

Peru has a high percentage of the population that identifies as indigenous at 45%, which is 15% higher than the cut-off value of 30% (International 2005). The percentage of the population that lives in a rural area is a moderately low 29%, but is 7% higher than in Mexico (Bank 2010). The headcount ratio of those that live in poverty in a rural area is 60%, not too different from Mexico's 61% (Bank 2010). The total percent of the population living below the poverty line is 34.8%, the lowest percentage of all four cases (CIA 2010). Based on these proxy variables for the structural factors, I conclude that this variable has a minimal to moderate effect on the educational gender gap.

Case Study: Belize

The small Central American country of Belize has not been as successful as Mexico and Peru in closing the educational gender gap. The primary school net attendance rate is equal between males and females at 95% (UNICEF 2005-2010). There is a small gap in literacy rate, 77% for males and 76% for females (UNICEF 2005-2010). The gap grows when measuring persistence until grade 5, which is 93% for females and 95% for males in Belize (Bank 2010). The gap in primary school completion rate is the largest of all the cases, with only 98% for females and 113% for males, a gap of 15%, which is far larger than the cut-off value of a 5% difference (Bank 2010). In addition, the percentage of girls who are out of school is 9%, the largest percentage in all of the cases (UNESCO 2008). In weighing the significant gender gaps with the equal attendance ratio, I conclude that Belize has a moderately large gender gap.

Patriarchy Variable

The culture of patriarchy still remains dominant in Belize. The Gender Inequality Index for Belize is moderately high compared to the rest of the cases at an index of 0.493, and is close to the cut-off value of 0.5 (UNDP 2011). The percentage of women in the labor force in Belize is a small majority at 51% (Bank 2010). As mentioned in the research design, the World Values Survey did not interview citizens in Belize in the 2005-2008 wave of interviews. Since there is not as much information on the patriarchal variable for Belize, my conclusion for this variable can only be considered moderate, and not strong in either direction.

Government Financial Investment Variable

Compared to other countries, the Belizean government has made significant investments in education. The government of Belize spends 18.7% of its total government expenditure on education, which is within 2% of the international benchmark of 20% (UNESCO 2009). This figure translates into 6.1% of GDP, the highest percentage of GDP spent on education across all four of these cases and is right on target with the international benchmark of 6% (UNESCO 2009). In addition, the Belizean government's per-student expenditure as a percent of GDP per capita is also the highest of all the cases, at 20% (Bank 2010). All of these variables culminate into a high level of governmental financial investment in Belize.

Family Variable

As mentioned in the literature review, family variables can have a negative impact on the decision to send girls to school. The literacy rate of adult females in Belize is a low 70%, a difference of 18% from the cut-off value of 88% (UNICEF 2005-2010). This is the lowest rate of the four countries, and negatively affects the educational gender gap. The adjusted fertility rate of women in Belize is a moderate 3.135 children per woman, just higher than the cut-off value of three children (Bank 2010). The adolescent fertility rate of Belizean girls aged 15-19 is 76 births per 1000, 25 births less than Peru (Bank 2010). After weighing these proxy variables for family influence, I conclude that family factors have a negative influence on the educational gender gap.

Structural Variable

The structural variable in Belize has a low impact on the educational gender gap. Belize has the lowest indigenous population of any country in this study, at only 10% of the population, a 20% difference when compared to the cut-off value of 30% (International 2005). However, Belize has the second highest rural population in the study at 47%, which is 18% higher than Peru (Bank 2010). The headcount ratio of rural people in poverty is 44%, indicating that poor people living in the rural areas are the minority (Bank 2010). The total percentage of the population that lives below the poverty line is 43%, a low figure compared to the other cases (CIA 2010). Overall, the structural variable has a low impact on the educational gender gap.

Case Study: Guatemala

Guatemala, a country that is still reeling from a brutal civil war that lasted 36 years, is struggling to educate its children equally. The educational gender gap in Guatemala is present in every proxy variable. The net attendance ratio of Guatemalan males is 95.7% while the net attendance ratio for females is 91.3% (UNICEF 2005-2010). The gap in youth literacy rate is 89% for males and 84% for females, a gap of 5% (UNICEF 2005-2010). Primary school completion rate has the largest gender gap, with 81% of females and 87% of males completing primary school, a gap of 6% (Bank 2010). The smallest gap is in the persistence to fifth grade, in which 70% of females and 71% of males continue on to fifth grade (Bank 2010). The percentage of girls that are out of school is 5%, which is lower than Belize, at 9%, but is still higher than Peru and Mexico (UNESCO 2008). Compared with a cut-off difference of 3%, all of these variables can be considered to have a large difference in values.

Due to the extent of the gaps in all of the proxy variables, I contend that there is a large educational gender gap in Guatemala.

Patriarchy Variable

Not only does Guatemala have the largest educational gender gap, but Guatemalan society is also highly patriarchal. The gender inequality index in Guatemala is the highest of all four of the cases in this study, at an index of 0.542, considerably higher than the cut-off value of 0.5 (UNDP 2011). The labor force participation rate is 42.5%, which is the lowest of all the cases in this study, a staggering 27.5% below the rate of Belize (Bank 2010).

The World Values Survey exhibits further the extent of gender inequality in Guatemala. It was a bit ambiguous as to whether or not Guatemalans approved the question of whether the respondent approves of a woman having a child outside of a marriage, as 48.2% approved and 44.3% disapproved (Survey 2004). A majority agreed with that statement that it is just as satisfying being a housewife as having a career (Survey 2004). Additionally, a majority of respondents disagreed with the statements "in general, men are better political leaders than women" as well as "in general, men are better business executives than women" which indicates that Guatemalan society views men and women as having equal leadership potential (Survey 2004). Finally, a large majority disagreed or strongly disagreed with the statement that "a university education is more important for men than for women (Survey 2004). Putting all of these proxy variables together, I contend that the patriarchy variable in Guatemala is at a moderately high level.

Government Financial Investment Variable

Compared to other countries in this study, the Guatemalan government's financial investment in education is quite low. The total amount the Guatemalan government spends on education, as a percentage of the total federal budget, is just 13.02%, 6.8% off the international benchmark of 20% (UNESCO 2009). This figure translates into just 3.2% of GDP, 2.8% off where translated international benchmark for GDP (UNESCO 2009). The percentage of GDP per capita that is allocated to per-student expenditure in Guatemala is 10%, half the per-student expenditure spent in Belize (Bank 2010). After analyzing all of these proxy variables, I have concluded that Guatemala has a low level of government financial investment in education.

Family Variable

The family variables in Guatemala have had negative effects on the educational gender gap. The adult female literacy rate, which indicates the level of education the mother receives, is a moderate 87% in Guatemala, close to the cut-off value of 88% (UNICEF 2005-2010). The adjusted national fertility rate is the highest of all the cases in this study, at 4.875 children per woman, much higher than the cut-off value of three children (Bank 2010). The adolescent fertility rate of girls aged 15-19 is the highest of all four cases as well, at 105 per 1000 births (Bank 2010). Considering that all of these values are quite high compared to the other cases in this study, I argue that the family variable in Guatemala has a negative impact on the educational gender gap.

Structural Variable

Structural factors in Guatemalan society have a significant impact on the educational gender gap. Guatemala has the highest percentage of indigenous peoples of all the cases at 55% of the population, 25% higher than the cut-off value of 30%. The percent of the population that lives in a rural setting is over half the population, at 51%. Of those who live in a rural area, the headcount ratio that lives in poverty is 71%, the largest of all four cases. The overall poverty rate in Guatemala is also the highest, at 56.2% of the population, indicating more than half the population lives in poverty. Taking all of these proxy variables into account, I conclude that the structural variable has a large influence on the educational gender gap in Guatemala.

Data Analysis

Mill's Indirect Method of Difference

The analysis that follows uses Mill's Indirect Method of Difference to analyze which factor is the most influential cause in the educational gender gap. This methodology uses a paired comparison of cases that have similar outcomes to see which independent variables are the most influential on the educational gender gap. The countries have been paired by size of the educational gender gaps, where both Mexico and Peru have minimally sized educational gender gaps while Guatemala and Belize both have sizeable educational gender gaps. By comparing the influence of the independent variables in this manner, we can more easily indentify which variable has a direct influence on the size of the educational gender gap.

Patriarchy Variable Across Cases

In both Mexico and Peru, countries in which the educational gender gap is closed, patriarchy was at a moderate level. In contrast, both Guatemala and Belize, countries in which the educational gender gap persists, have high levels of patriarchy. Given that the two country clusters have the same level of patriarchy between cases, Mill's Indirect Method of Difference allows me to conclude that patriarchy is a significant variable, because the cases covariate together.

Government Financial Investment Across Cases

The level of governmental financial investment in Mexico is high, while in Peru it is quite low. In Belize, the government invests more in education that any of the other cases while Guatemala invests the smallest amount of all the cases. If these variables were to be significant, then both Guatemala and Belize should have low levels of governmental financial investment and both Peru and Mexico would have high levels. Since this is not what seems to have happened with the data, I conclude that governmental financial investment is not a significant indicator of the size of the educational gender gap.

Family Variables Across the Cases

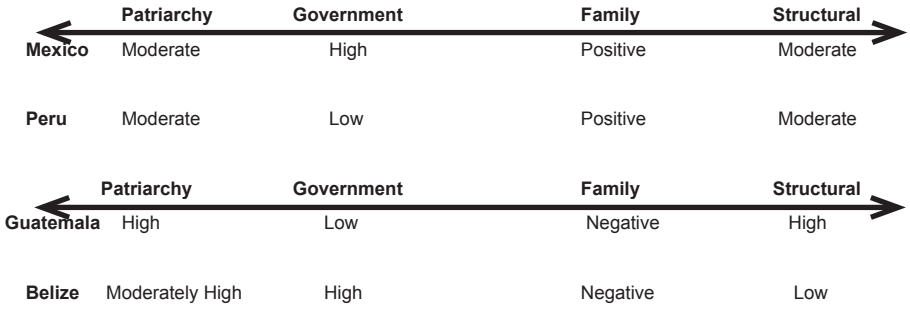
In the cases of Mexico and Belize, both countries have strong, positive family variables. On the other hand, Guatemala and Belize both have strong, negative family influence variables. It is clear that the countries with closed gender gaps have positive family variables and the countries with

persistent educational gender gaps have negative family variables. Using Mill's Indirect Method of Difference, I conclude that family variables have a significant impact on the educational gender gap.

Structural Variables Across the Cases

The structural variables in both Mexico and Peru have moderate effects on the educational gender gap. While this could come to a significant conclusion, this is not the case in the other country cluster. Guatemala has a high structural variable, but Belize has a low structural variable. Due to this difference, I cannot conclude that this variable has an effect on the educational gender gap. Therefore, I conclude that structural variables are insignificant variables.

Figure 1: Mill's Indirect Method of Difference Data Visualization



The above visualization illustrates how Mill's Indirect Method of Difference concludes which variables are significant and which variables are insignificant.

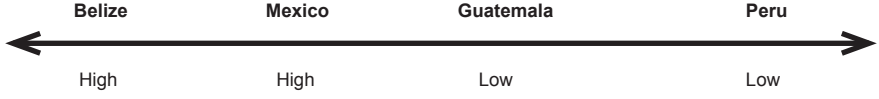
Analysis of the Hypotheses

After analyzing the case studies and using Mill's Indirect Method of Difference to find the most significant causational variables, I analyzed my findings in the context of the hypotheses outlined in my research design.

Hypothesis 1: As the Gender Inequality Index increases, the gender gap increases:

The ends of either side of the spectrum indicate that when the Gender Inequality Index increases, the size of the gender gap also increases. Therefore, this hypothesis failed to be rejected and I can conclude that this covariation exists and gender inequality is a significant variable.

Hypothesis 2: As governmental financial investment increases, gender gap decreases.



If this hypothesis were to be true, Belize should have had a low level of government financial investment and Peru would have a high level of investment. This is not the case. Therefore, the governmental financial investment variable has been rejected, and I conclude that this covariation does not exist and the variable is insignificant in causing the educational gender gap.

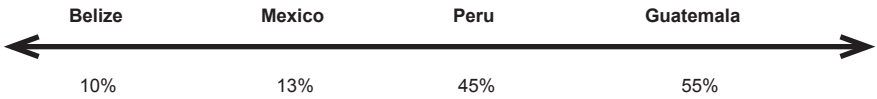
Hypothesis 3: As adjusted fertility rate increases, gender gap increases.

As the adjusted fertility rate increases across the cases, there is an exact correlation with the size of the educational gender gap. Therefore, I have failed to reject this hypothesis and conclude that this covariation does exist and fertility rate is a significant variable.

Hypothesis 4: As adult female literacy rate increases, gender gap decreases.

As is evident in the figure above, as the adult female literacy rate increases, the gender gap decreases. When moving along the spectrum, the highest literacy rate corresponds to a small educational gender gap and a low literacy rate corresponds to the largest educational gender gap. Therefore, I fail to reject this hypothesis and conclude that covariation does exist and adult female literacy rate is a significant variable.

Hypothesis 5: As the indigenous population increases across cases, the gender gap increases.



If this hypothesis were to be true, Peru should have a low indigenous population and Belize should have a high indigenous population. However, this is not the case. Therefore, we reject the hypothesis and conclude that covariation does not exist and that indigenous population is not a significant indicator.

Results

By using Mill's Indirect Method of Difference, I discovered which variables were significant and which were insignificant in causing the educational gender gap. The first variable I found to be significant is patriarchal society structure. This result indicates that the more patriarchal the society, the larger the educational gender gap. The second variable I found to be significant is family factors. High education level of the mother leads to a smaller family size and the family is therefore more likely to send their daughters to school.

In concluding which variables were significant, I was able to discover which variables were insignificant. I found that governmental financial investment in education did not have a significant effect

on the final outcome of the educational gender gap size. This indicates that, even though a country may have a large percentage of their budget designated towards education, this does not necessarily translate into a smaller educational gender gap. In addition, I found the structural variable to be insignificant in causing the educational gender gap. This result implies that factors like presence of a large indigenous population does not translate into a large educational gender gap.

Conclusion

As a result of this study, I found patriarchal societal structure and family factors have the largest causational effects on the size of the educational gender gap. The data showed increases in adult female literacy rate, and decreases in the Gender Inequality index and adjusted fertility rate, lead to a decrease in the size of the educational gender gap. In addition, I found governmental financial investment in education and structural factors do not have a strong causational effect on the size of the educational gender gap. In the case of these two variables, the data did not covariate together, which indicates that the variables are not significant in effecting the size of the educational gender gap. These results surprised me, because they directly contradicted my hypotheses and assumptions.

The most surprising results, in particular, were that the insignificant variables had many policy implications. First, the data showed the governmental financial investment variable was insignificant, which is contrary to the consensus of the international development community. As discussed in the introduction, for years international conferences on education have concluded that the best way to combat the educational gender gap is through governmental financial investment in the education sector. The findings of this study directly contradict this conclusion, and argue that more government financial investment in education does not lead to a reduced educational gender gap. This conclusion indicates that the way the international community intends to fix the gender gap would do little to actually bring about educational equality.

While structural factors, such as percentage of rural and indigenous populations, did not have a significant effect on the educational gender gap overall, these proxy variables have particular relevance in Guatemala. In Guatemala, 1 in 5 indigenous girls do not attend school (Foundation 2011). Since this figure is so high in Guatemala, I was surprised to see that this variable was not significant across the four cases. In addition, the literature review extensively discussed the many barriers that indigenous women face as well as the impact of lack of access to schools for those in rural populations, but these variables did not seem significant across cases.

A major flaw in my research was the inclusion of the World Values Survey data and the missing values for Belize. At the time this paper was written, the 2010-2012 wave had not been published, and therefore the results from that wave of interviews could not have been used. In addition to missing values, the conclusions made based on the data are subjective and many assumptions were made in including this in the research. In some cases the percentages were so close it was difficult to gauge the general consensus of the country.

From a statistical standpoint, the idea of proving causation of a phenomenon with such little data is troubling, and would argue the conclusions made here are weak. A statistician would argue true causation can only be found in a multiple linear regression model of aggregated world data, in order to see which of the regression coefficients is the largest and which has the most significant

correlation. For the purpose of this study, the sample size was too small and dependent variable was inherently categorical, which does not satisfy the normality assumptions necessary for using a regression model.

Future research should use the suggested multiple linear regression model to find the exact causal mechanisms of size of the educational gender gap. Additionally, future research should investigate how indigenous girls are marginalized from the educational system, which further perpetuates the educational gender gap. A theory that could be focused on in the future is the possible impact of teacher quality on whether girls attend school. Finally, future research could focus on how education sector-specific donor aid either reduces or perpetuates the educational gender gap.

Going forward, the goal of governments should be to reduce patriarchy and make family factors have a more positive influence. Governments could implement such projects by starting a grassroots movement to reduce patriarchy and increasing the adult female literacy rate through adult education programs. Finally, although I found the structural variable to be insignificant across these four cases, governments should work to reduce both institutional and societal discrimination against indigenous women to help reduce the educational gender gap. Overall, governments and international organizations should reduce the focus on increasing governmental financial investment as the answer to closing the educational gender gap and begin programs to increase the societal value of girl's education.

Appendix: Data Tables

Mexico

Tables of all of the variables

Case Studies:	**Mexico**
Dependent Variable: Size of Gender Gap	
Net attendance rate: male	97%
Net attendance rate: female	97%
Youth literacy rate: male	99%
Youth literacy rate: female	98%
Percent of girls out of school	1%
Primary completion rate, female	104%
Primary completion rate, male	104%
Persistence to Grade 5, female	95%
Persistence to Grade 5, male	95%
Patriarcy Variable	
Gender Inequality Index	0.448
Labor Force Participation rate % of female pop	47%
World Values Survey	See Below
Government Variable	
Gov Expenditure on Education % of GDP	4.9%
% of total goverment expenditure	21.60%
Per student expenditure as % of GDP per capita	16
Family Variable	
Female literacy rate	97%
Infant mortality rate	13/1000= 0.013
National fertility rate	2.1
Adjusted fertility rate	2.1-0.013= 2.096
Adolescent fertility rate of girls 15-19 [births per 1000]	68
Structural Variable	
Percent indgenous population	13%
Percent rural population	22%
Poverty headcount ration rural poverty line	61%
Poverty of population below poverty line	48%

World Values Survey Data Tables

59. If a woman decides to have a child as a single mother, and does not want to have a relationship with a man, do you approve or disapprove?

VALUES SURVEY DATABANK

Selected countries/samples:†Mexico [2005]

BASE=1560 Weight [with split ups]	Woman as a single parent				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Approve	942	60.4 %	60.4 %	60.8 %	60.8 %
Disapprove	513	32.9 %	93.3 %	33.1 %	93.9 %
Depends	94	6.0 %	99.3 %	6.1 %	100.0 %
Don¥t know	11	0.7 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

For each of the following phrases, would you tell me whether you strongly agree, agree, disagree or strongly disagree?

60. Being a housewife is just as satisfying as having a job.

VALUES SURVEY DATABANK

Selected countries/samples:†Mexico [2005]

BASE=1560 Weight [with split ups]	Being a housewife just as fulfilling				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	279	17.9 %	17.9 %	18.5 %	18.5 %
Agree	832	53.3 %	71.2 %	55.1 %	73.6 %
Disagree	355	22.8 %	94.0 %	23.5 %	97.1 %
Strongly disagree	44	2.8 %	96.8 %	2.9 %	100.0 %
Don¥t know	29	1.9 %	98.7 %		
No answer	21	1.3 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

61. In general, men are better political leaders than women.

VALUES SURVEY DATABANK

Selected countries/samples:†Mexico [2005]

BASE=1560 Weight [with split ups]	University is more important for a boy than for a girl				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	55	3.5 %	3.5 %	3.6 %	3.6 %
Agree	322	20.6 %	24.2 %	21.3 %	25.0 %
Disagree	878	56.3 %	80.4 %	58.1 %	83.1 %
Strongly disagree	255	16.3 %	96.8 %	16.9 %	100.0 %
Don¥t know	16	1.0 %	97.8 %		
No answer	34	2.2 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

62. Having a university education is more important for men than for women.

VALUES SURVEY DATABANK
Selected countries/samples:†Mexico [2005]

BASE=1560 Weight [with split ups]	University is more important for a boy than for a girl				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	55	3.5 %	3.5 %	3.6 %	3.6 %
Agree	322	20.6 %	24.2 %	21.3 %	25.0 %
Disagree	878	56.3 %	80.4 %	58.1 %	83.1 %
Strongly disagree	255	16.3 %	96.8 %	16.9 %	100.0 %
Don¥t know	16	1.0 %	97.8 %		
No answer	34	2.2 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

63. In general, men are better business executives than women.

VALUES SURVEY DATABANK
Selected countries/samples:†Mexico [2005]

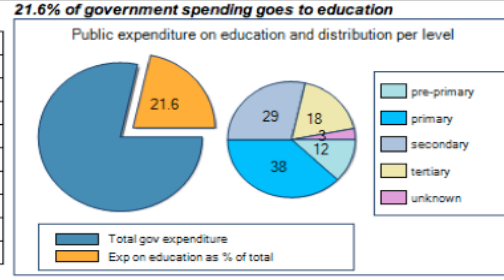
BASE=1560 Weight [with split ups]	Men make better business executives than women do				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	50	3.2 %	3.2 %	3.3 %	3.3 %
Agree	291	18.7 %	21.9 %	19.3 %	22.6 %
Disagree	911	58.4 %	80.3 %	60.4 %	83.0 %
Strongly disagree	256	16.4 %	96.7 %	17.0 %	100.0 %
Don¥t know	22	1.4 %	98.1 %		
No answer	30	1.9 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

UNESCO Data Table of Government Spending on Education

2009

Pupil / teacher ratio (primary)		28
Public expenditure on education :		
as % of GDP	(2008)	4.9
as % of total government expenditure	(2007)	21.6
Distribution of public expenditure per level (%) - 2008 :		
pre-primary		12
primary		38
secondary		29
tertiary		18
unknown		3



World Values Survey Data Tables

59. If a woman decides to have a child as a single mother, and does not want to have a relationship with a man, do you approve or disapprove?

VALUES SURVEY DATABANK

Selected countries/samples:†Mexico [2005]

BASE=1560 Weight [with split ups]	Woman as a single parent				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Approve	942	60.4 %	60.4 %	60.8 %	60.8 %
Disapprove	513	32.9 %	93.3 %	33.1 %	93.9 %
Depends	94	6.0 %	99.3 %	6.1 %	100.0 %
Don¥t know	11	0.7 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

For each of the following phrases, would you tell me whether you strongly agree, agree, disagree or strongly disagree?

60. Being a housewife is just as satisfying as having a job.

VALUES SURVEY DATABANK

Selected countries/samples:†Mexico [2005]

BASE=1560 Weight [with split ups]	Being a housewife just as fulfilling				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	279	17.9 %	17.9 %	18.5 %	18.5 %
Agree	832	53.3 %	71.2 %	55.1 %	73.6 %
Disagree	355	22.8 %	94.0 %	23.5 %	97.1 %
Strongly disagree	44	2.8 %	96.8 %	2.9 %	100.0 %
Don¥t know	29	1.9 %	98.7 %		
No answer	21	1.3 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

61. In general, men are better political leaders than women.

VALUES SURVEY DATABANK

Selected countries/samples:†Mexico [2005]

BASE=1560 Weight [with split ups]	University is more important for a boy than for a girl				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	55	3.5 %	3.5 %	3.6 %	3.6 %
Agree	322	20.6 %	24.2 %	21.3 %	25.0 %
Disagree	878	56.3 %	80.4 %	58.1 %	83.1 %
Strongly disagree	255	16.3 %	96.8 %	16.9 %	100.0 %
Don¥t know	16	1.0 %	97.8 %		
No answer	34	2.2 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

62. Having a university education is more important for men than for women.

VALUES SURVEY DATABANK

Selected countries/samples:†Mexico [2005]

BASE=1560 Weight [with split ups]	University is more important for a boy than for a girl				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	55	3.5 %	3.5 %	3.6 %	3.6 %
Agree	322	20.6 %	24.2 %	21.3 %	25.0 %
Disagree	878	56.3 %	80.4 %	58.1 %	83.1 %
Strongly disagree	255	16.3 %	96.8 %	16.9 %	100.0 %
Don¥t know	16	1.0 %	97.8 %		
No answer	34	2.2 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

63. In general, men are better business executives than women.

VALUES SURVEY DATABANK

Selected countries/samples:†Mexico [2005]

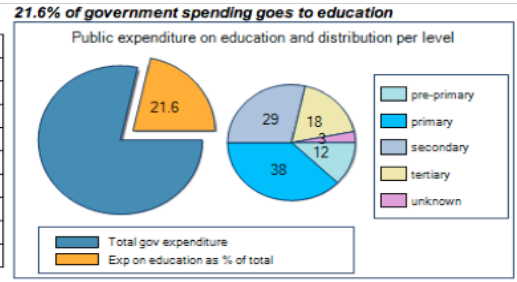
BASE=1560 Weight [with split ups]	Men make better business executives than women do				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	50	3.2 %	3.2 %	3.3 %	3.3 %
Agree	291	18.7 %	21.9 %	19.3 %	22.6 %
Disagree	911	58.4 %	80.3 %	60.4 %	83.0 %
Strongly disagree	256	16.4 %	96.7 %	17.0 %	100.0 %
Don¥t know	22	1.4 %	98.1 %		
No answer	30	1.9 %	100.0 %		
Total	**1560**	**100%**		**1560**	**100%**

Source: Values Surveys Databank

UNESCO Data Table of Government Spending on Education

2009

Pupil / teacher ratio (primary)		28
Public expenditure on education :		
as % of GDP	(2008)	4.9
as % of total government expenditure	(2007)	21.6
Distribution of public expenditure per level (%) - 2008 :		
pre-primary		12
primary		38
secondary		29
tertiary		18
unknown		3



Peru

Tables of all of the Variables

Case Studies:	Peru
Dependent Variable: Size of Gender Gap	
Net attendance rate: male	98%
Net attendance rate: female	97%
Youth literacy rate: male	96%
Youth literacy rate: female	98%
Percent of girls out of school	3%
Primary completion rate, female	87%
Primary completion rate, male	90%
Persistence to Grade 5, female	83%
Persistence to Grade 5, male	85%
Patriarcy Variable	
Gender Inequality Index	0.415
Labor Force Participation rate % of female pop	70%
World Values Survey	See Below
Government Variable	
Gov Expenditure on Education % of GDP	2.6%
% of total goverment expenditure	16%
Per student expenditure as % of GDP per capita	8
Family Variable	
Female literacy rate	89%
Infant mortality rate	14/1000= 0.014
National fertility rate	3
Adjusted fertility rate	3-0.014= 2.986
Adolescent fertility rate of girls 15-19 [births per 1000]	51
Structural Variable	
Percent indgenous population	45%
Percent rural population	29%
Poverty headcount ration rural poverty line	60%
Poverty of population below poverty line	34.8%

World Values Survey Data Tables

59. If a woman decides to have a child as a single mother, and does not want to have a relationship with a man, do you approve or disapprove?

VALUES SURVEY DATABANK

Selected countries/samples:†Peru [2006]

BASE=1500 Weight [with split ups]	Woman as a single parent				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Approve	590	39.3 %	39.3 %	40.0 %	40.0 %
Disapprove	749	50.0 %	89.3 %	50.7 %	90.7 %
Depends	137	9.1 %	98.4 %	9.3 %	100.0 %
No answer	23	1.6 %	100.0 %		
Total	**1500**	**100%**		**1500**	**100%**

Source: Values Surveys Databank

For each of the following phrases, would you tell me whether you strongly agree, agree, disagree or strongly disagree?

60. Being a housewife is just as satisfying as having a job.

VALUES SURVEY DATABANK

Selected countries/samples:†Peru [2006]

BASE=1500 Weight [with split ups]	Being a housewife just as fulfilling				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	153	10.2 %	10.2 %	10.9 %	10.9 %
Agree	694	46.2 %	56.4 %	49.3 %	60.1 %
Disagree	523	34.9 %	91.3 %	37.2 %	97.3 %
Strongly disagree	38	2.5 %	93.8 %	2.7 %	100.0 %
No answer	92	6.2 %	100.0 %		
Total	**1500**	**100%**		**1500**	**100%**

Source: Values Surveys Databank

61. In general, men are better political leaders than women.

VALUES SURVEY DATABANK

Selected countries/samples:†Peru [2006]

BASE=1500 Weight [with split ups]	Men make better political leaders than women do				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	34	2.3 %	2.3 %	2.3 %	2.3 %
Agree	221	14.7 %	17.0 %	15.2 %	17.5 %
Disagree	1037	69.1 %	86.2 %	71.1 %	88.6 %
Strongly disagree	167	11.1 %	97.3 %	11.4 %	100.0 %
No answer	41	2.7 %	100.0 %		
Total	**1500**	**100%**		**1500**	**100%**

Source: Values Surveys Databank

62. Having a university education is more important for men than for women.

VALUES SURVEY DATABANK

Selected countries/samples:†Peru [2006]

BASE=1500 Weight [with split ups]	University is more important for a boy than for a girl				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	29	1.9 %	1.9 %	2.0 %	2.0 %
Agree	157	10.5 %	12.4 %	10.7 %	12.7 %
Disagree	1059	70.6 %	83.0 %	72.3 %	84.9 %
Strongly disagree	221	14.7 %	97.7 %	15.1 %	100.0 %
No answer	34	2.3 %	100.0 %		
Total	**1500**	**100%**		**1500**	**100%**

Source: Values Surveys Databank

63. In general, men are better business executives than women.

VALUES SURVEY DATABANK

Selected countries/samples:†Peru [2006]

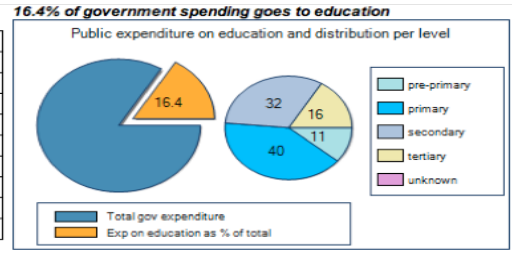
BASE=1500 Weight [with split ups]	Men make better business executives than women do				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	27	1.8 %	1.8 %	1.9 %	1.9 %
Agree	180	12.0 %	13.8 %	12.4 %	14.3 %
Disagree	1034	68.9 %	82.7 %	71.2 %	85.5 %
Strongly disagree	211	14.0 %	96.8 %	14.5 %	100.0 %
No answer	49	3.2 %	100.0 %		
Total	**1500**	**100%**		**1500**	**100%**

Source: Values Surveys Databank

UNESCO Data Table of Government Spending on Education

2009

Pupil / teacher ratio (primary)	20
Public expenditure on education :	
as % of GDP	2.6
as % of total government expenditure	16.4
Distribution of public expenditure per level (%) - 2009 :	
pre-primary	11
primary	40
secondary	32
tertiary	16
unknown	-



Belize

Tables of all the Variables

Case Studies:	Belize
Dependent Variable: Size of Gender Gap	
Net attendance rate: male	95%
Net attendance rate: female	95%
Youth literacy rate: male	77%
Youth literacy rate: female	76%
Percent of girls out of school	9%
Primary completion rate, female	98%
Primary completion rate, male	113%
Persistence to Grade 5, female	93%
Persistence to Grade 5, male	95%
Patriarcy Variable	
Gender Inequality Index	0.493
Labor Force Participation rate % of female pop	51%
World Values Suvrey	NO INFO
Government Variable	
Gov Expenditure on Education % of GDP	6.1%
% of total goverment expenditure	18.7%
Per student expenditure as % of GDP per capita	20
Family Variable	
Female literacy rate	70%
Infant mortality rate	15/1000= 0.015
National fertility rate	3.15
Adjusted fertility rate	3.15-0.015= 3.135
Adolescent fertility rate of girls 15-19 [births per 1000]	76
Structural Variable	
Percent indgenous population	10%
Percent rural population	47%
Poverty headcount ration rural poverty line	44%
Poverty of population below poverty line	43%

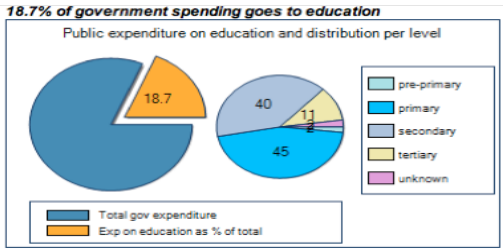
World Values Survey Data

{Not Available}

UNESCO Data Table of Government Spending on Education

2009

Pupil / teacher ratio (primary)		23
Public expenditure on education :		
as % of GDP		6.1
as % of total government expenditure	(2008)	18.7
Distribution of public expenditure per level (%) - 2009 :		
pre-primary		2
primary		45
secondary		40
tertiary		11
unknown		2



Guatemala

Tables of all the Variables

Case Studies:	Guatemala
Dependent Variable: Size of Gender Gap	
Net attendance rate: male	95.7
Net attendance rate: female	91.3
Youth literacy rate: male	89%
Youth literacy rate: female	84%
Percent of girls out of school	5%
Primary completion rate, female	81%
Primary completion rate, male	87%
Persistence to Grade 5, female	70%
Persistence to Grade 5, male	71%
Patriarcy Variable	
Gender Inequality Index	0.542
Labor Force Participation rate % of female pop	42.5%
World Values Suvrey	See below
Government Variable	
Gov Expenditure on Education % of GDP	3.2%
% of total goverment expenditure	13.02%
Per student expenditure as % of GDP per capita	10
Family Variable	
Female literacy rate	87
Infant mortality rate	25/1000= 0.025
National fertility rate	4.9
Adjusted fertility rate	4.9-0.025= 4.875

Adolescent fertility rate of girls 15-19 [births per 1000]	105
Structural Variable	
Percent indgenous population	55%
Percent rural population	51%
Poverty headcount ration rural poverty line	71%
Poverty of population below poverty line	56.2%

World Values Survey Data Tables

59. If a woman decides to have a child as a single mother, and does not want to have a relationship with

VALUES SURVEY DATABANK

Selected countries/samples:†Guatemala [2004], Peru [2006]

BASE=2500 Weight [with split ups]	Woman as a single parent				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Approve	1206	48.2 %	48.2 %	48.8 %	48.8 %
Disapprove	1108	44.3 %	92.6 %	44.8 %	93.6 %
Depends	159	6.4 %	98.9 %	6.4 %	100.0 %
Don¥t know	3	0.1 %	99.1 %		
No answer	23	0.9 %	100.0 %		
Total	**2500**	**100%**		**2500**	**100%**

Source: Values Surveys Databank

For each of the following phrases, would you tell me whether you strongly agree, agree, disagree or strongly disagree?

60. Being a housewife is just as satisfying as having a job.

VALUES SURVEY DATABANK

Selected countries/samples:†Guatemala [2004], Peru [2006]

BASE=2500 Weight [with split ups]	Being a housewife just as fulfilling				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	462	18.5 %	18.5 %	19.5 %	19.5 %
Agree	1083	43.3 %	61.8 %	45.7 %	65.2 %
Disagree	728	29.1 %	90.9 %	30.8 %	96.0 %
Strongly disagree	95	3.8 %	94.7 %	4.0 %	100.0 %
Don¥t know	40	1.6 %	96.3 %		
No answer	92	3.7 %	100.0 %		
Total	**2500**	**100%**		**2500**	**100%**

Source: Values Surveys Databank

61. In general, men are better political leaders than women.

VALUES SURVEY DATABANK

Selected countries/samples:†Guatemala [2004], Peru [2006]

BASE=2500 Weight [with split ups]	Men make better political leaders than women do				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	146	5.8 %	5.8 %	6.0 %	6.0 %
Agree	422	16.9 %	22.7 %	17.4 %	23.4 %
Disagree	1403	56.1 %	78.9 %	57.8 %	81.2 %
Strongly disagree	457	18.3 %	97.1 %	18.8 %	100.0 %
Don¥t know	31	1.2 %	98.4 %		
No answer	41	1.6 %	100.0 %		
Total	**2500**	**100%**		**2500**	**100%**

Source: Values Surveys Databank

62. Having a university education is more important for men than for women.

VALUES SURVEY DATABANK

Selected countries/samples:†Guatemala [2004], Peru [2006]

BASE=2500 Weight [with split ups]	University is more important for a boy than for a girl				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	127	5.1 %	5.1 %	5.2 %	5.2 %
Agree	262	10.5 %	15.5 %	10.7 %	15.9 %
Disagree	1442	57.7 %	73.2 %	59.0 %	74.8 %
Strongly disagree	616	24.6 %	97.9 %	25.2 %	100.0 %
Don¥t know	19	0.8 %	98.6 %		
No answer	34	1.4 %	100.0 %		
Total	**2500**	**100%**		**2500**	**100%**

Source: Values Surveys Databank

63. In general, men are better business executives than women.

VALUES SURVEY DATABANK

Selected countries/samples:†Guatemala [2004], Peru [2006]

BASE=2500 Weight [with split ups]	Men make better business executives than women do				
	Frequency	Percent	Cumulative Percent	Valid percent	Cumulative valid percent
Agree strongly	27	1.1 %	1.1 %	1.9 %	1.9 %
Agree	180	7.2 %	8.3 %	12.4 %	14.3 %
Disagree	1034	41.4 %	49.6 %	71.2 %	85.5 %
Strongly disagree	211	8.4 %	58.1 %	14.5 %	100.0 %
No answer	49	1.9 %	60.0 %		
Not asked in survey	1000	40.0 %	100.0 %		
Total	**2500**	**100%**		**2500**	**100%**

Source: Values Surveys Databank

Bibliography

Arnot, M. (1994). Male Hegemony, Social Class and Women's Education. The Education Feminism Reader. L. Stone. New York, NY, Routledge: 84-104.

Bank, W. (2010). World Development Indicators.

Blanc, C. L. a. A. K. (1996). "Children's Schooling in Sub-Saharan Africa: The Role of Fathers, Mothers and Others." Population and Development Review 22(2): 265-298.

Case, K. F. B. a. A. (1994). "The Effect of Sibling Sex Composition on Women's Education and Earnings." The Quarterly Journal of Economics 109(3): 531-563.

CIA (2010). People and Society- Poverty. C. W. F. Book.

Creighton, M. (2010). "Closing the Gender Gap: Six Decades of Reform in Mexican Education." Comparative Education Review 54(4): 513-537.

Dussaillant, F. (2011). "The Intergenerational Transmission of Maternal Human Capital and the Gender Gap in Educational Attainment." Economics Letters 111: 226-229.

Foundation, G. U. (2011). Girl Up-Guatemala. United Nations. U. N. Foundation.

International, M. R. G. (2005). Indigenous Peoples-Mexico. World Directory of Minorities and Indigenous Peoples.

Khaled, K. L. (2011). Public Financing in Education in Bangladesh. The Financial Express. Dhaka, Hindustan Times Media Ltd.

King, L. (1999). Everyday Violence and Women's Education in Latin America. Gender, Innovation and Education in Latin America. I. J. a. L. King. Hamburg, Germany, UNESCO: 79-100.

Leach, F. (1998). "Gender, Education and Training: An International Perspective." Gender and Development 6(2): 9-18.

Mehta, D. J. H. a. C. F. a. J. D. (2002). "Studying Rare Events Through Qualitative Case Studies: Lessons from a Study of Rampage School Shootings." Sociological Methods & Research 31(2): 174-217.

Moreno, A. (2005-2008). World Values Survey- Mexico. G. Reforma.

Ono, H. (2004). "Are Sons and Daughters Substitutable? Allocation of Family Resources in Contemporary Japan." Japanese International Economies 18: 143-160.

Rankin, B. H. (2006). "Gender Inequality in Schooling: The Case of Turkey." Sociology of Education 79(1): 25-43.

Raza, A. (2010). "Gender Gap in Pakistan: Socio-demographic Analysis." International Journal of Social Economics 37(7): 541-557.

Romero, C. (2006). World Values Survey- Peru. I. d. O. P. d. l. PUCP.

Steelman, L. C. (2002). "Reconsidering the Effects of Sibling Configuration: Recent Advances and Challenges." Annual review of Sociology 28: 243-269.

Survey, W. V. (2004). World Values Survey- Guatemala.

Swainson, N. (1995). Redressing Gender Inequalities in Education. A Review of Constraints and Priorities in Malawi, Zambia and Zimbabwe. London, England, Overseas Development Administration: 98.

UNDP (2011). Human Development Report-Gender Inequality Index. UNDP.

UNESCO (2008). Table 7: Measures of Children Out-of-School. UNESCO.

UNESCO (2009). Resources Spent on Education. UNESCO.

UNICEF (2005-2010). Education Statistics- Mexico. UNICEF. unicef.org.

Vaishnav, N. B. a. M. (2005). "Education and the MDGs: Realizing the Millennium Compact." Journal of International Affairs 58(2): 257-264.

VanBalkom, S. E. a. W. D. (2011). "Education and Development: Twelve Considerations for Transformative Practice." International Education 40(2): 22-39.

VanEvera, S. (1997). Guide to Methods for Students of Political Science. Ithaca, NY, Cornell University.

TÜRKENPROBLEMATIK" 2011: VIEWS OF GERMAN YOUTH TOWARDS THE TURKISH MINORITY

Colin Benz

Historical Context

In the 1960s because of a stagnant economy, the Federal Republic of Germany (hereinafter as West Germany) invited Turks to Germany to work as "guest workers" (Legge 2003, 142). They were to work there for two years and then return to their homeland, but many of the "guest workers" stayed and brought their families. In 1960, there were less than 2,000 Turks in Germany (Die Zeit, March 24, 2004). The increase of immigrants into Germany has been accompanied by an increase in tensions between the German majority and the Turkish minority (Süddeutsche Zeitung, March 26, 2010). Today, there are an estimated three million Turks living in Germany and integration, assimilation or deportation of the Turks are major topics of discussion (Kaya 2009, 42).

Before the reunification in 1990, there were relatively few Turks in East Germany. There was a small percentage of foreigners from other Eastern Bloc countries, including Poland and Czechoslovakia, as well as other communist countries, like Mozambique (Legge 2003, 142; Smith 1998, 78). Once the borders were removed, Turks and other foreigners began to move to the bigger cities in Eastern Germany such as Berlin, Dresden and Leipzig. But because there had already been many attacks on foreigners by skinheads and neo-Nazis, those of Turkish origin were not saved from discrimination by migrating to the East. And indeed, in 1991, right-wing violence broke out in Hoyerswerda, Saxony, in the former GDR towards guest workers. Throughout the year, there were more than 1,000 reported acts of violence towards foreigners in former East Germany (Braunthal 2009, 101). A year later, three women and two children were murdered in Solingen, Mecklenburg-Vorpommern in the most infamous xenophobic attack to date. But xenophobia has not only become apparent through these attacks, but also through the biennial ALLBUS study.

The ALLBUS study "Die Allgemeine Bevölkerungsumfrage der Sozialwissenschaften" or "German General Social Survey" is conducted every two years to discover the population's thoughts on a wide range of topics. In 1996 and 2006, the ALLBUS showed that East Germans felt predominantly more negative towards foreigners and Turks than West Germans. In 1996, 42.6% of East Germans believed that it would be to some degree unpleasant to have a Turk as a neighbor. Ten years later, that percentage rose to 48.8%. In the 2006 ALLBUS study alone, 27.8% of East Germans completely believed that there were "Too many foreigners in Germany" and an additional 44.2% somewhat agreed that there were too many.

In the wake of September 11th, the attacks in Madrid and London, and the failed package bomb

assassination of the German chancellor, Angela Merkel, relations between Germans and non-Germans have become more tense. Although Turkey considers itself to be European and is participating in EU membership negotiations, many Germans still perceive Turkey to be a Middle Eastern nation. In light of these attitudes, German scholarship recognizes and documents that the discussion of integration, assimilation, or deportation of the Turks has become even more important. (Süddeutsche Zeitung, February 13, 2008). According to German scholars, there is an increasing dislike of Turkish immigrants (Dick, Wagner and Zick 2000, 16). This is apparent in the increase of anti-foreigner violence and murder in the last decade. In 2010, the newspaper "Der Tagesspiegel" reported that there were 147 murders in the last two decades.

The so-called "Türkenproblematik" (Problem of the Turks) has become a hot topic of discussion in both German and Turkish politics. With the Turkey's growth over the last decade to become the seventeenth largest economy in the world, Turkey has become a formidable contender on the international stage. In 2008, Turkey's ultra-conservative Prime Minister Recep Tayyip Erdoğan spoke to a crowd in Cologne declaring that the "…assimilation of the Turks in Germany is a crime against humanity" (Süddeutsche Zeitung, February 13, 2008). Two years later in Düsseldorf, encouraged by the outstanding response by Turks to his first speech, Erdoğan demanded that the German government create and pay for schools specifically for Turkish immigrants. He went further, demanding that the schools not only be taught in Turkish, but that the teachers of those schools be brought in from Turkey (Süddeutsche Zeitung, February 13, 2008). Erdoğan does not intend to help Germany and Turkey come to better terms with one another, as evidenced in his statement that "[he and those present] will not allow his words [from his speech] to be allowed into German media" (Die Welt, February 28, 2011). And because of the results from the June elections earlier this year, the world will have at least four more years of strongman statements.

The increasing amount of discussion about the Turks has not been confined to verbal interaction; journalists and researchers have increased their efforts to understand this major issue. They have used many different lenses with which to understand German "xenophobia," "islamophobia" and the Turkish problem overall. From interviews and individual case studies, there have been many papers written on this topic (Boehnke, Hagan and Hefler 1998, 585; Fertig and Schmidt 2008, 110; Lüdemann 2005, 5). However among all of the sources that I have found, none of the reports or surveys specifically target the German youth as a whole. One of the questions included in the Pew Research Center's "Pew Global Attitudes Project" survey did examine the views of Germans towards the Turkish minority. It stated that between 1991 and 2009 there was a decrease from 46% to 30% in unfavorable views (2009, 52). However, this one very general question does not provide any particular insight into why these changes occurred. Additionally, this survey was directed at the German population as a whole, not at the youth in particular. I do admit that the Pew Research Center's decision to do a random sampling of interviewees is the best way to discover this kind of information because it is the closest option there is to surveying every German citizen. Nevertheless, the study by Pew consisted of only one question, which could not paint a very detailed picture of the situation. Likewise, Pew's survey and the ALLBUS surveys focus on the German population as a whole, not solely on the youth. It is under this context that this paper began.

In this research project, I aimed to discover how the contemporary youth of Germany view the Turkish minority and specifically whether German youth have xenophobic tendencies. If it is true, I

will then be able to determine what the causes are and compare them to previous research findings. Since the fall of the Berlin Wall, there has been a reported increase in right extremism in Germany specifically towards minorities. Studies and polls on sentiments towards Turks from as late as 2006 have all found that a plurality of Germans view Turks in a negative light (ALLBUS 2006). I want to know if this is the same in the final months of 2011 and what factors may or may not play any part in influencing xenophobic tendencies.

Negative Attitudes towards Foreigners: Four Justifications

Since the reunification of German Democratic Republic and the Federal Republic of Germany in 1990, few scholars have disagreed that Ausländerfeindlichkeit (xenophobia) towards those of Turkish origin by the German youth has risen and that East Germans are more prejudiced towards foreigners than West Germans. But for the past twenty-one years, scholars have drawn many diverging conclusions on the origins of xenophobia. These determinants of youth prejudice range from socio-psychological reasons to the type of school attended.

Literature discussing the source of xenophobia in German adolescents from the past two decades can be divided (sometimes loosely) into four schools of thought. This literature will be explained in more depth following this summary. To some researchers, it is the educational track (i.e. vocational or college-bound) that a German chooses to follow that will establish the student's feelings towards foreigners. Scholars who belong to the Socio-Demographic/Contact School hold that socio-demographics like age, gender and regional location are the determinants of whether a person will have xenophobic tendencies. Proponents of Socio-Economic/Hierarchic Self-Esteem Theory contest that how economically well-off a person is shapes their self-esteem, which subsequently influences anti-foreigner sentiment. They advocate increased contact between ethnicities because they believe a higher amount of contact leads to a decrease in anti-foreigner sentiment. Finally, some scholars posit that there is not one specific reason that German youths develop anti-Turkish sentiment, but a conglomeration of the aforementioned reasons. All of these schools are based on the assumption that there is indeed a trend of rising xenophobic views in contemporary German youth and all schools view German youth negatively.

For those of the Education Track School, the type of school a person attends (vocational, middle ground or university bound) determines how strongly their xenophobic sentiments will be (Fertig and Schmidt 2009, 99). Unlike the American school system where all students receive relatively the same education from Kindergarten through high school, German students are required to choose a career path at a very early age (between 10-14). The type of school a student attends after elementary school is directly dependent on the type of profession a student wants to enter into later. Students attend either a Hauptschule for a vocation, a Realschule for an extended general education, or a Gymnasium, a school that offers an intensive education. Only students with a diploma from a Gymnasium are guaranteed entry into a German university (Realschule students are occasionally given partial access and students from a Hauptschule are barred). Students not only take different classes, but they also attend different schools, which isolates them from other students.

Those who are destined for a no-collar or blue-collar career (Hauptschule, Realschule) expect significant competition between peers over their future social status (Rippl 2002, 135-146). In order to defend against their perceived lower social status, youths treat foreigners the way they foresee they

will be treated later on. Concurrently, those on a university track (Gymnasium) expect little competition from other types of educational tracks and experience a feeling of superiority over the rest. Consequently, there is no reason for Gymnasium students to treat foreigners as though they are from a lower class. Those who know they will receive more respect in society because of their education have no need to demean others.

Scholars who are proponents of the Contact/Socio-Demographic Theory hold that it is actually how much a person interacts with Turks and foreigners that will mold sentiment towards non-Germans. Scholars van Dick, Wagner, and Zick state that there is an indirect correlation between the amount of time spent with a foreigner and the level of xenophobic tendencies a person develops (2000, 16). This means that the more inter-ethnic contact there is, the less likely that the German will develop a xenophobic mentality. This phenomenon demonstrates the contact/socio-demographic field, which argues additionally that it is age, gender and especially contact with foreigners that influence a person's view of Turks (Dick, Wagner and Zick 2000, 16). Therefore, it is logical that East Germans, who have will have less contact with Turks simply because there are fewer Turkish people living there (1.9% less according to Dick, Wagner and Zick), will have more negative feelings towards them.

The third theoretical camp is the Hierarchal Self-Interest Theory. Proposed by scholars Boehnke , Hefler and Hagan, this theory contends that the society of united Germany has created a competitive mentality of its people, making them focus only on their own self-interests (Boehnke, Hagan and Hefler 1998, 585-602). Supporters of this theory reject the idea that the type of school a person attends changes their mentality towards foreigners; socio-economic theorists posit that it is the student's location in the socio-economic hierarchy that determines xenophobic sentiment. The combination of competition and self-interest inherent in German society creates a dynamic where each person is strongly tied to socio-economics and the hierarchy of society. The further down in the socio-economic hierarchy a person is, the less highly they will see themselves. Boehnke, Hagan and Hefler's research in "On the Development of Xenophobia in Germany" concludes that self-esteem is positively correlated with prejudice towards foreigners: the lower the self-esteem and higher the levels of hierarchic self-interest, the lower the amounts of xenophobic sentiment (1998, 598).

The final group of scholars believes that there are many influences on levels of xenophobia in youth. These scholars connect the similarities between different theories and how they influence one another. Birgit Becker notes the importance of age and education: different ages mean different experiences in life, which determines what forms of contact a person may have had. Household mentality towards foreigners can influence the way a child thinks and education potentially determines the economic situation of a person (Becker 2005, 49). She also points out that a person's mentality towards foreigners depends on different factors and whether they are from the East or the West. One must note, however, that while authors in this school agree on most things, occasionally there is some disagreement. Becker states that contact has a minimal effect on anti-foreigner sentiments while others, like Jürgen Hoffmeyer-Zlotnik, argue the opposite (2000, 5). Johann Bacher posits that socio-demographics (such as age and gender), education track, family and circle of friends all play a part in influencing a student (Bacher 2001, 334-339). But this is not all: location can determine economic status and contact with foreigners as well (compare a family that lives in an area with a high concentration of foreign residents to one that is surrounded by mostly ethnic Germans) (Hoffmeyer-Zlotnik 2000, 5). Because of these disagreements, this final group is less unified in its way of thinking than

others: a proposed set of variables overlaps slightly with another set of variables and so on. Nevertheless, points made by authors in this group are no less logically supported than those from other schools of thought.

It is difficult to believe that only one or two variables can influence a person's mentality towards another person. Just as it is impossible to generalize people's personalities solely on their location (or on gender, education, etc.), so too is it impossible to believe German youth's attitudes about the Turks depend on one variable. In response to the Education Track School, students within a single school each have different opinions on different topics. Additionally, there must be certain reasons why a student chose to go to a particular school (parental influence, location of the school, etc.). What school a person chooses depends on outside factors and, if youth mentality depends on education, it must therefore depend on the factors that brought the student to the school in the first place.

The second school, "Contact/Socio-Demographic Theory," is on a better track, for it acknowledges that there are multiple layers to cause a person's perception of something. However, authors from this school do not delve deep enough, failing to consider other factors like religion, income and political affiliation. The third school contradicts itself: authors Boehnke, Hagan and Helfer explicitly state that self-esteem is positively correlated with xenophobia, but later on say that those lower in the hierarchy compete more with foreigners, increasing xenophobia. In this research, I have built upon the final school of thought that age, location, education track and friend circles influence sentiment towards Turks, and added income, religion, contact and political affiliation to the list.

At the time of their publication, the arguments contained in each scholar's paper might have been valid. However, this might not be true today in 2012: the youth are constantly getting older and the youth of the 1990s and 2000s are not (for the most part) the youth of the 2010s. All of the authors' research builds off of the assumption that xenophobia among German youth exists and that it is increasing. The subsequent paper will start from a tabula rasa or a blank slate. In other words, the research will be conducted with no assumption and the end result can be any combination of the schools of thought described in this paper. The theories are only looked at as a whole and are deemed neither "right" nor "wrong." This is because their results are from the years 1993 to 2008 and they might no longer be applicable in the year 2012.

Other studies have shown that over time, opinions of populations change. Whether it is feelings toward same-sex marriage in the United States or feelings towards Ukrainians in Russia, a population's opinions change. This does not necessarily mean that the opinions become more positive. In the Global Attitudes Project's section on the opinions of citizens in former Soviet nations, unfavorable views of the Russians toward the Lithuanians increased from 7% to 32% from 1991 to 2009. Likewise, Lithuanian disapproval towards Jews grew 27% from 10% to 37%. That is not to say, however, that there has only been rising disapproval in all countries towards others. It solely points out that opinions have changed.

In the eighteen years between the first and second surveys, an entire generation grew up and another died. Eighteen years worth of people who could not be surveyed before (either because they were too young or they were not born yet) replaced the older population who died. And as population surveys go, there are almost always more young people than there are older people. Therefore the proportion of people's opinions with ages in the teens and twenties is greater than that of the people in their 60s and 70s. People born in the late 80s were too young to remember what life was like with

two Germanys. The oldest people who were surveyed were born in 1985 and the youngest were born in 1996. Sixty-five percent or 87 of those surveyed were born after the reunification and grew up in a place completely unrecognizable to someone born twenty years earlier. Those who were surveyed for this research were a completely new sample. We have yet to see what the youth of Germany think about Turks in their country and what influences their sentiments. Are prejudices against foreigners, and specifically the Turks, in Germany increasing as proven in previous articles or are they decreasing? Are there xenophobic tendencies among the German youth at all? My research will explore those questions.

Hypothesis

I posit that there is a high prevalence of anti-Turkish sentiment overall among the youth in Germany. More specifically, I believe that older males from former East Germany (I define this as the states of Mecklenburg-Vorpommern, Brandenburg, Saxony, Saxony-Anhalt, Thuringia and former Soviet-controlled Berlin) who are attending or who have attended a vocational school are more likely to have a negative attitude towards Turks. In contrast, younger females from Western Germany (Bavaria, Baden-Württemberg, Saarland, Rhineland Palatinate, North Rhine-Westfalia, Lower Saxony, Bremen, Schleswig-Holstein, Hesse and Hamburg) who attend a college-track school or who are in university are more likely to have a positive attitude towards the Turks.

Although so far there has been no research to prove whether or not religion affects sentiment towards the Turks, I foresee that religion will be an intervening variable. I intend to control it through more statistical testing. The survey will contain demographic questions regarding religion and the results will be compared against the critical questions. Just like religion, political affiliation has also not been studied in the past and a question regarding which political party the responder identifies with the most will also be asked. Likewise, I will see if the results from this question have a correlation with pro-or anti-Turkish sentiment.

From the studies that have been found, none of them have focused specifically on the views of the German youth population towards the Turkish minority. They have studied the sources of xenophobia, both for adults and youth, and one included comparing the education level of students and their xenophobic views, while other studies have questioned the German population as a whole regarding different minorities (Turks, Jews, Arabs, Russians etc), but not one of them matched the specific goal that this research does.

Overall, regarding the German population's view towards the Turks, different studies have produced different results. Some say that there is an increase in animosity towards the biggest ethnic minority in Germany, while others say the opposite. For example, the Pew Research Institute, in their Pew Global Attitudes Project, surveyed Germans in 1991 (a year after the reunification) and in 2009. In West Germany, unfavorable views decreased from 45% to 28% over those 18 years and in East Germany, it dropped from 51% to 36%. Although this study does state that views moved in a positive direction over those eighteen years, contradicting other studies, it also agrees with many studies like the ALLBUS that there is still a higher degree of xenophobia in former East Germany than in Western Germany as previously discussed.

Methodology

The intent of this research was to discover contemporary opinions of German teens and twenty-year-olds towards those of Turkish descent living in Germany. Because there were no studies answering that question specifically, the only option was to conduct a survey myself. Even if there had been many works about the views of the German youth towards the Turkish minority, they still would not have been the most up-to-date seeing as they would have been done in the past. The more recent the survey, the more representative it is. I could have compared works from different authors but it would not tell anything about what the youth's opinions were. It would not have been permissible for me to survey direct friends of mine in Germany because they might alter their answers. Therefore, I asked almost everyone I knew in Germany, Austria and other countries to forward the survey to their friends who lived in Germany, requesting that they fill it out.

In middle school I was an exchange student at a Gesamtschule in Potsdam outside of Berlin. In high school I attended the Palucca Hochschule for dance in Dresden for a month, took a course at the Goethe-Institut in Berlin and a year later went to school for a year at a Gymnasium in Vienna, Austria. Additionally, I have close ties with the German-American Society of Portland, Oregon and I have German friends who were exchange students to the US and American students who went on exchange to Germany in high school and college. These six access points connect me to a wide spectrum of youths from all over the Federal Republic.

Of the seventy people I asked, 56 of those people agreed to forward their survey. Informants of German citizenship lived in five of the sixteen German Federal States (hereinafter Bundesland or Bundesländer), but they forwarded them to people in other Bundesländer. It was my hope to cover as many Bundesländer as possible, as well as to incorporate a range of individuals from the largest cities to small villages. The more places I received set responses from, the higher the likelihood of getting a representative sample.

There were, of course, problems with creating and conducting a survey instead of analyzing previous studies. The largest and most significant problem was that the survey could not reach enough people to make a representative sample of all of Germany: 136 people is simply not large enough to be considered representative. In addition, I was not able to access people from every social, economic and educational background from my chosen age range from all of the sixteen Bundesländer. But the survey did cover twelve of the sixteen Bundesländer and did include students from many of the different types of schools. But responses originated predominantly from Baden-Württemberg in the South, Nordrhein-Westfalen and Rheinland-Pfalz in the West, and Berlin in the East. This made the survey even less representative for each of the Bundesländer and the East-West variable.

Operationalization

For the purposes of this survey, "German" is defined as someone who has citizenship with the Federal Republic and who has lived within its borders for the majority of their life. Most importantly, a "German" in this survey is someone who has spent the majority of their secondary education in a school found within the borders of the Bundesrepublik. Unlike in the United States, where anyone born within the borders is given automatic citizenship, in order to obtain German citizenship, a person must have blood relations with someone of German citizenship. In other words, a person born in Germany whose parents who have lived all their lives in Germany but do not have German citizenship

is not eligible for citizenship (Schmid 1995, 231). Due to jus sanguinis, it is easier to weed out those of Turkish origin who fill out this survey, as this survey aims to find out the opinions of those of German blood.

"Youth" must also be conceptualized. For this survey, "youth" is anyone from the age of 12 to 26, which are the ages when most people are in secondary and tertiary school. This particular age range was chosen because, according to David Dobbs from the National Geographic Society, it is within this timeframe that independent thinking begins, which is due to the development of the prefrontal cortex in the brain (Dobbs 2011). The limit extends to the age 26 because some youth will still be in school or will have just started their career and will not necessarily be living on their own.

Finally, "Turk" and "Turkish" must also be defined. For the purposes of this study, a "Turk" or "Turkish person" is anyone who currently lives in Germany who is either from Turkey, or whose parents, grandparents or other nuclear relatives emigrated from Turkey.

Data Results: Frequencies

In total, there were 149 responses to the survey, which was above my 100 response minimum. However, thirteen of the results had to be discarded because those particular respondents were not from Germany. This left me with 136 individual answers to examine. All of the questions and their answers were put into IBM SPSS (Statistical Package for Social Sciences) software to be analyzed. The complete original survey in German and the translated survey in English are reported in Appendix I and II.

There were exactly 68 male and 68 female respondents spanning the ages of 15 to 26. This is almost perfectly representative of the German sex ratio, considering that males make up about 49.0% of the German population (CIA World Factbook, 2010). 110 out of the 138 responses (79.7%) originated from former West Germany. As of 2010, the former West makes up about 80% of the population, so in total this was a relatively accurate representation of the East versus West population distribution, albeit without accurate representation for each Bundesland (Proportionen der Weltbevölkerung, 2010). For the purposes of this survey, the entire Bundesland of Berlin was categorized as East Germany, despite the fact that half of it was located in West Germany during the Cold War. This was to simplify survey questions. According to a 2008 census conducted by the Federal Statistical Office of Germany, 30% of the German population are Catholics, 29.9% Protestants, 34.1% Atheists and 6% other (Forschungsgruppe, 2009). This is similar, albeit not exact, to 32.4% Catholics, 29.4% Protestants, 27.2% Atheists and 11% other in the survey. The one Muslim, two Jews and believers of other religions were categorized together due to their low numbers.

As for political party affiliation, there are 622 seats in the Bundestag, the German Parliament. In the 2009 election, the Bundestag was divided up as follows: 239 seats for the CDU/CSU (38.42%), 146 seats for the SPD (23.47%), 93 for the FDP (14.95%), 76 for Die Linke (12.22%) and 63 for Bündnis 90/Die Grünen (10.93%). In the general election in 2009, 33.8% voted for the CDU/CSU, 23.0% for the SPD, 11.9% for Die Linke, 14.6% for the FDP, 10.7% for die Grünen and 1.5% for the Pirate Party. The latter set of statistics is more representative of the German opinion because only the parties with 5% of the vote or over are allowed to send delegates to the Bundestag. For example, although 1.5% of the population voted for the Pirate Party, there is no representation whatsoever in the Bundestag (Bundestag.de, 2009).

Forty of those surveyed identified with the CDU/CSU (29.41%), 28 with the SPD (20.59%), 5 with Die Linke (3.68%), 10 with the FDP (7.36%), 41 with Die Grünen (30.15%) and 5 with the Pirate Party (3.68%), a party which does not as of yet have representation in the Bundestag but does have representation in state parliaments (Bundeswahlleiter.de, 2009). Although there are significant differences between the percentages of votes for parties and party identification, it must be noted that these are being compared to what the entire German population as a whole voted, not what the German youth voted.

Due to the low number of respondents (thereby not making the results representative of the entire German youth population), it was very difficult to find much significance in the relationships between demographics and the views towards the Turks. Fortunately, there were still a few relations of significance that must be noted.

More than half of the respondents did not believe that there were too many Turks in Germany. In addition, almost 80% of all the respondents did not feel mistrustful of Turks that they met (see Appendix III and IV). Although there were still negative answers (ca. 15% were mistrustful and 30% believed there were too many Turks), this was much smaller than what was in the ALLBUS survey (68.2% believed there were too many foreigners in 2006). Perhaps this is because most of the respondents attended gymnasium or university; perhaps it was because most of the respondents were from West Germany or perhaps it was because most of the respondents had internet access. As will soon be discussed, the numbers from vocational school and from East Germany are too small to make any significant conclusions and this is especially true for those who do not have internet access, seeing as this was an internet-based survey. But nevertheless, the overall sentiment towards Turks in particular is not terrible.

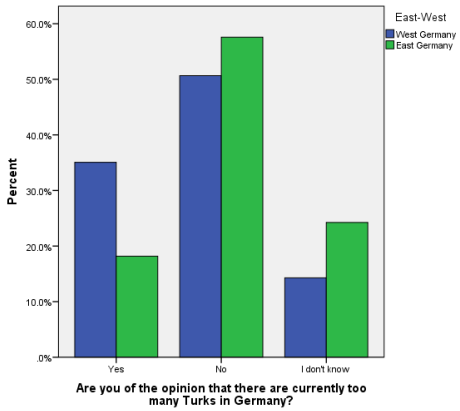
Results for other variables are also surprising: out of the 136 respondents, exactly half of them believed that Turkey should not become a member of the European Union, while 27.2% were uncertain about the topic leaving the remaining 22.8% in support for Turkish membership. However, 72.8% believed that all headscarves should not be banned and 51.1% of all respondents believed that illegal immigrants should not be deported from Germany. The German youth, overall, seems open to the Turks residing in Germany. However, although social ideals seem to be progressive, the youth still do not approve of including Turkey as part of Europe. Further research is needed to glean more information on the different layers of Turkish residency.

Location: East vs. West Germany

Over 35% of West Germans said they believed there were too many Turks in Germany, in contrast to the less than 20% of East Germans. This includes the fact that Berlin is categorized in "East Germany," where the largest minority of Turks is located. Although in both cases more people do not believe that there are too many Turks, a larger percentage of East Germans said "No." This is contrary to previous scholarship like the ALLBUS and Birgit Becker's work that East Germans are more likely to dislike Turks than West Germans. Location may indeed affect a person's mentality, but not necessarily in the way that was originally thought. This is also surprising because there are fewer Turks in East Germany, so one would think that the lack of contact would cause a rise in anti-Turkish sentiment. Unfortunately for this research, there is only a 15% significance level of location of respondent and their response to this question. So while initially intriguing, too much stock cannot be put into

these statistics.

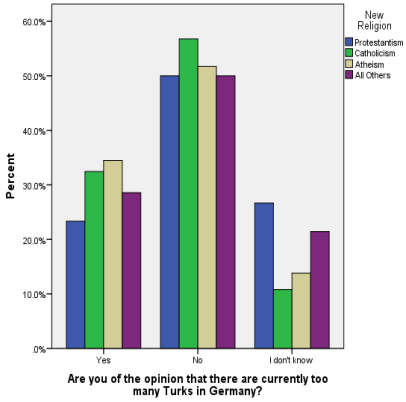
Graph 1



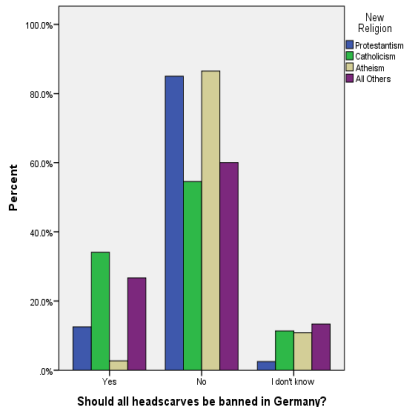
Religion

So although there is lower significance for the crosstab of location and the opinion on the number of Turks in Germany, it is still possible to analyze other, more sound, comparisons. When seeing if there is any relation between professed religion and responses to the same question, surprisingly the biggest percentage of "No" respondents were Catholic, who tend to lean conservative. Atheists, on the other hand, who are usually more liberal, voted around 35% "Yes." But this percentage is still less than the atheists who voted "No." With this it might be possible to conclude that although the results are not overwhelmingly different, it is still worth noting.

Graph 2



Graph 3



Because religion was not considered a factor in previous studies, it was my goal to see if there was perhaps a correlation. And in the case of professed religions versus the banning of headscarves, there seemed to be a relationship, as seen in figure 3. When youths were asked whether or not headscarves should be banned, the majority in each category said "No." However, 60% of those who answered "Yes" were Catholic while only about 20% of the whole were Protestant. In this particular case, Catholics tend to be more xenophobic than Protestants who tend to side more with the atheists. It might not be a surprise that most of the atheists do not believe that headscarves should be banned, seeing as non-religious people are more likely to side with more liberal political parties (FDP, Die Linke, Die Grünen), which have a more multi-cultural politik. However, it might surprise some that Protestants are more open-minded.

A person can identify themselves as a follower of a particular religion and hardly ever attend a religious service or pray. When importance of religion was tested against questions 13-19, there was no chi-square that was predominantly in the 70th and 80th percentile, meaning that the results are appearing around 70-80% out of chance. This means that how important religion is to a person has no effect on how a person responds to those questions. Because of this, it wasn't worth doing further research and I concluded in this survey there was little to no correlation between religiosity and opinions towards the Turks.

Education

Many aforementioned authors labeled education as the determinant of how someone feels about Turkish people. In question eight of the surveys, respondents were asked to identify what kind of school they were currently attending, or, if they were finished with school, what kind of school they had graduated from. The majority of respondents were not from universities but rather from Gymnasien (52.9%). Universities followed with 27.2% and vocational schools (Berufsschule, Fachhochschule etc) with the remaining 19.9%. To make things simpler, I grouped the schools into two categories, namely a "University Track" (Gymnasium and University) and a "Vocational Track" (Berufsschule, Berufsakademie, Fachhochschule etc).

When students were asked the seven questions about the Turks, none of them had a low enough chi-square to be statistically significant. No matter whether each school was listed individually (Berufsschule, Gymnasium, University etc.) or grouped together into "Vocational Track" and "University Track," there was no significance less than 16%. Most of the time the chi-square hovered in the range of 70 to 90% and it is not worth trusting such a high probability that the answers were by chance. This is most likely because more than 90% of those surveyed were in a Gymnasium or University and in some cases, 100% of one group answered the same, it was because there was only one person in that particular group. Due to this major lack of accurate representation, I must concede that it is hardly possible to make any trustworthy conclusions on the topic.

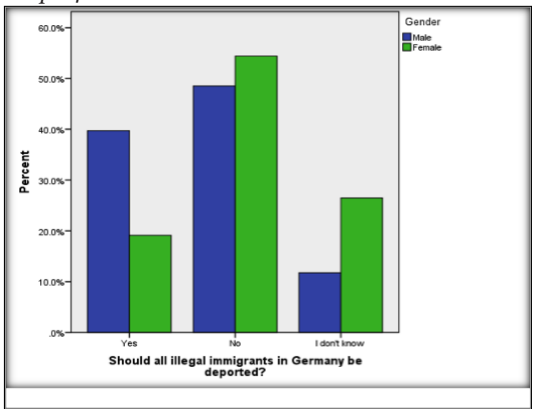
Gender

Both the Social Demographic/Contact School and the Multi-Variable School believe that gender affects how a German will perceive Turkish migrants (Bacher 2001, 334-343). For this reason I included gender as another control variable. Out of all of the other variables with statistical significance, the gender variable had the most significant results.

When asked whether Turkey should become a member of the EU, there was more than a 20% difference between men and women who said "No." More than 60% of men did not support Turkish membership and only around 35% of women did not, fewer than 20% of men supported Turkish integration into the EU community and 30% of women did. In addition, around 30% of women were uncertain about the topic, in contrast to the 20% of men. With a probability of only 2.3% that these results occurred by chance, we can be pretty certain that when it comes to Turkey joining the European Union, men are more likely to be unsupportive of it and women more welcoming, if not more uncertain.

When it comes to the discussion on whether all illegal immigrants in Germany should be deported, there is no lower significance than in the discussion between the responses of men versus women on this particular topic. Responses to this question were similar to the questions about EU membership in that more people in both parties chose "No" rather than "Yes." However, the margin between women's "No" and "Yes" responses was about 40%, whereas the margin for men was less than 10%. Moreover, only around 10% of men were uncertain whereas almost 30% of women were.

Graph 4



From this we can gather that women are more likely to be kind-hearted and lenient towards foreigners than are men. It must be pointed out that seeing as deportation is a much more serious topic than others, there is the potentiality that a person would be hesitant to choose the less politically-correct option.

Failed Variables

There was not a single chi-square low enough to be statistically significant for the age, income, friends, religiosity and prayer variables for any of the questions. Because of this, no further analysis was conducted. As for the contact variable, the only relationship found was with whether or not the State should require immigrants to learn German. However, this was most likely because all of the "I don't know" answers were located in the "once a week" group (see Appendix VII). If we are assuming that this survey is representative of the entirety of Germany, then the original hypothesis that those variables influence how a youth views a Turk is false.

Implications

The results from this study are especially important considering the fact that it is the teens and 20-year-olds that are the first post-reunification generation who will be joining the job market soon. For those who run for political office, the sentiments of this generation will be especially important for the future of the status of Turkish immigrants and relations between the Turkish Republic and the Federal Republic of Germany. It is these opinions that will impact the outcome of elections and shape the future decisions of politicians. Equally as important, establishing the source of xenophobia in this generation in particular, the German government might be able to implement policies that will lead the country down a path that is more (or less) open to the Turkish minority in Germany and Turkey. It must be admitted, however, that results from the ALLBUS are more representative of Germany (although not necessarily the youth) and that the results from this survey are not nearly enough to base any concrete hypotheses on. Nevertheless, the goal of the survey to discover what the German youth think is definitely one to be researched in more depth.

If the results of this survey are to be true, we can expect a warming of relations between Germans and Turkish Germans in the coming years. This might allow a change in citizenship law, allowing for more Turks to become citizens. Islamic religious education might become an option in schools for those who opt for it, the Turkish language might be taught as one of the foreign languages and more people of Turkish decent could run for political office. On top of this, the ban on headscarves worn by professionals might be lifted and there might be more inter-marriages between Germans and Turks. Names like Yağmur Herrmann and Helmut Yılmaz will become more common. However, this is on the condition that there are no other outside influences to change this. If there were to be a terrorist attack on a European country by Turks or Muslims, sentiment could very well take a turn for the worse.

Conclusion

This analysis focuses on which factors determine how German youth view the Turkish minority. Overall, the survey did not show that there was significant distrust among German youth and that they did not believe there are too many Turks in Germany. This result contradicts previous studies concluding that anti-Turkish sentiment is rising, but does agree with the Pew Research Institute's survey from 2009. This particular finding, regardless of age, income, friends, religiosity, prayer frequency and contact variables with attitudes towards the Turks conclude that most of the hypothesis is false. Nevertheless, this study can be built upon in the future to see if, with a larger, more representative sample there actually are relationships between the chosen variables. But currently, as this was a student survey, we can only hypothesize further.

Appendix

Figure 1: English Survey

1. Do you have German citizenship?
    a. Yes
    b. No
2. What is your gender:
    a. Male
    b. Female
3. How old are you?
    12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
4. Where did you live for the majority of your secondary schooling?
    a. City:
    b. State:
    c. Country:
5. How important is religion in your life?
    a. Very important
    b. Somewhat important
    c. Not too important
    d. Not at all important
6. Which religion do you identify with?
    a. Protestantism
    b. Catholicism
    c. Islam
    d. Other:_____
7. Outside of attending religious services, do you pray…
    a. several times a day?
    b. once a day?
    c. a few times a week?
    d. once a week or less?
    e. Never?
8. What type of school did you graduate from or are you currently attending?
    a. Gesamtschule
    b. Gymnasium
    c. Realschule
    d. Hauptschule
    e. University
    f. Hochschule
    g. Fachhochschule
    h. Berufsschule
    i. Berufsakademie
    f. Fachschule

9. What is the net monthly household income of all of the members of your household after taxes and social security?
    a. Under 500€
    b. 1 000€
    c. 1 500€
    d. 2 000€
    e. 2 500€
    f. 3 000€
    g. 3 500€
    h. 4 000€ or more
10. Which political party do you support the most:
    a. CDU/CSU
    b. SPD
    c. Die Linke
    d. FDP
    e. Die Grünen
    f. Other: _____
11. Have you had Turkish classmates, friends or coworkers?
    a. Yes
    b. No
12. How often do you come in contact (30 minutes or more) with people from Turkey?
    a. Multiple times a day
    b. Once a day
    c. A few times a week
    d. Once a week
    e. Hardly ever
    f. Never
13. Should Turkey be a member of the EU?
    a. Yes
    b. No
    c. I don't know
14. Should Turks living in Germany be required to learn German in school?
    a. Yes
    b. No
    c. I don't know
15. Should Germany pay for schooling for Turkish immigrants taught in Turkish?
    a. Yes
    b. No
    c. I don't know

16. Should all illegal immigrants in Germany be deported?
    a. Yes
    b. No
    c. I don't know
17. Should Germany ban all face veils?
    a. Yes
    b. No
    c. I don't know
18. Are you typically mistrustful of Turks that you meet?
    a. Yes
    b. No
    c. I don't know
19. Are you of the opinion that there are currently too many Turks in Germany?
    a. Yes
    b. No
    c. I don't know
20. Do you have any addition comments about this topic?

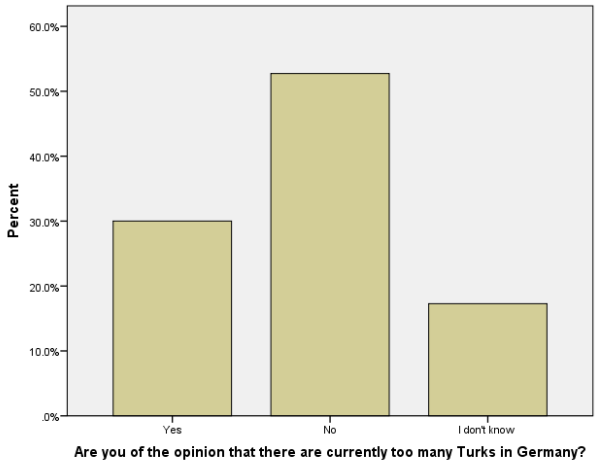
Figure 2: German Survey

1. Besitzen Sie eine deutsche Staatsbürgerschaft?
    a. Ja
    b. Nein
2. Sind Sie männlich oder weiblich?
    a. männlich
    b. weiblich
3. Wie alt sind Sie?
    12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
4. Wo haben Sie die Mehrheit ihrer Sekundärausbildung verbracht?
    a. Ort:
    b. Bundesland:
    c. Land:
5. Wie wichtig ist Religion in Ihrem Leben?
    a. Sehr wichtig
    b. Wichtig
    c. Ein wenig wichtig
    d. Gar nicht wichtig
6. Mit welcher Religion identifizieren Sie sich?
    a. Protestantismus
    b. Katholizismus
    c. Islam
    d. Sonstige:_____

7. Außer beim Gottesdienst, wie oft beten Sie?
    a. Oft am Tag
    b. Einmal am Tag
    c. Mehrmals pro Woche
    d. Einmal pro Woche
    e. Selten
    f. Nie
8. Was für eine Schule besuchen Sie gerade ODER wenn Sie fertig mit der Schule sind, von was für einer Schule haben Sie ihren Abschluss?
    a. Gesamtschule
    b. Gymnasium
    c. Realschule
    d. Hauptschule
    e. Hochschule
    f. Fachhochschule
    g. Berufsschule
    h. Berufsakademie
    i. Fachschule
    j. Universität
9. Wie lautet das monatliche Haushaltseinkommen aller der Mitglieder Ihres Hauswesens nach Steuern und Sozialversicherung?
    a. Weniger als 500€
    b. 500€ - 999€
    c. 1 000€ - 1 499€
    d. 1 500€ - 1 999€
    e. 2 000€ - 2 499€
    f. 2 500€ - 2 999€
    g. 3 000€ - 3 499€
    h. 3 500€ - 3 999€
    i. 4 000€ oder mehr
10. Mit welcher politischen Partei schließen Sie sich am meisten an?
    a. CDU/CSU
    b. SPD
    c. Die Linke
    d. FDP
    e. Die Grünen
    f. Sonstige: _____
11. Haben Sie türkische Bekannten, Mitschüler, Mitarbeiter oder Freunde?
    a. Ja
    b. Nein

12. Wie oft kommen Sie in Kontakt mit Türken (dreißig Minuten oder länger)?
    a. Oft am Tag
    b. Einmal am Tag
    c. Mehrmals pro Woche
    d. Einmal pro Woche
    e. Selten
    f. Nie
13. Soll die Türkei ein Mitglied der EU werden?
    a. Ja
    b. Nein
    c. Ich weiß nicht
14. Sollen in Deutschland-lebende Türken verlangt, Deutsch an der Schule zu lernen?
    a. Ja
    b. Nein
    c. Ich weiß nicht
15. Soll Deutschland für die Ausbildung türkischer Migranten bezahlen, die auf Türkisch gelehrt wird?
    a.Ja
    b. Nein
    c. Ich weiß nicht
16. Sollen Staatsangehörigen anderer Länder, die in Deutschland leben aber keine Aufenthaltsbenehmigung besitzen, von Deutschland deportiert werden?
    a. Ja
    b. Nein
    c. Ich weiß nicht
17. Sollen Kopftücher in Deutschland verboten werden?
    a. Ja
    b. Nein
    c. Ich weiß nicht
18. Begegnen Sie einem Türken in Deutschland prinzipiell misstrauisch?
    a. Ja
    b. Nein
    c. Ich weiß nicht
19. Haben Sie das Gefühl, dass es bereits zuviele Türken in Deutschland gibt?
    a. Ja
    b. Nein
    c. Ich weiß nicht
20. Ich würde mich über zusätzliche Kommentare und Anregungen über dieses Thema freuen. Wenn sie irgenwelche haben, bitte schreiben Sie sie im folgenden Platz.

Graph 5



Graph 6

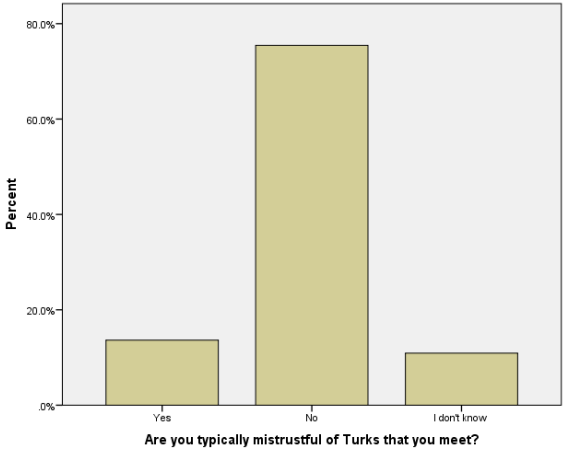


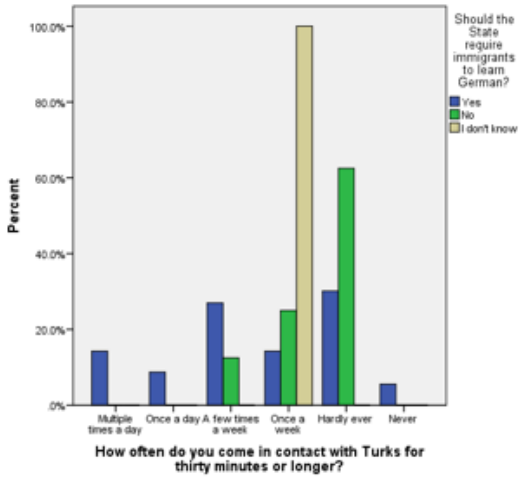
Table 1

Crosstab					
Count					
		Are you of the opinion that there are currently too many Turks in Germany?			
		Yes	No	I don't know	Total
How often do you come in contact with Turks for thirty minutes or longer?	Multiple times a day	4	9	2	15
	Once a day	1	6	3	10
	A few times a week	10	14	6	30
	Once a week	4	8	4	16
	Hardly ever	11	19	4	34
	Never	3	2	0	5
Total		33	58	19	110

Table 2

Crosstab					
Count					
		Should the State require immigrants to learn German?			
		Yes	No	I don't know	Total
How often do you come in contact with Turks for thirty minutes or longer?	Multiple times a day	18	0	0	18
	Once a day	11	0	0	11
	A few times a week	34	1	0	35
	Once a week	18	2	2	22
	Hardly ever	38	5	0	43
	Never	7	0	0	7
Total		126	8	2	136

Graph 7


Should the State require immigrants to learn German?
Yes
No
I don't know
Percent
100.0%
80.0%
60.0%
40.0%
20.0%
.0%
Multiple times a day
Once a day
A few times a week
Once a week
Hardly ever
Never
How often do you come in contact with Turks for thirty minutes or longer?

Bibliography

Alba, Richard, Schmidt, Peter and Martina Wasmer. 2003. Germans or Foreigners? New York: Palgrave Macmillan.

Bacher, Johann. 2001. „In welchen Lebensbereichen lernen Jugendliche Ausländerfeindlichkeit?☐ Kölner Zeitschrift Für Soziologie Und Sozialpsychologie 53, no. 2. http://search.proquest.com/docview/198261502?accountid=8285.

Becker, Birgit. 2005. „Der Einfluss der Bezugsgruppenmeinung auf die Einstellung gegenüber Ausländern in Ost- und Westdeutschland," Zeitschrift für Soziologie, 34, no. 1: 40-59. http://www.zfs-online.org/index.php/zfs/article/view/1181.

"Bevölkerungsentwicklung Deutschlands 1950 bis 2010," Proportionen der Weltbevölkerung, http://www.pdwb.de/nd06.

Boehnke, Klaus, John Hagan, and Gerd Hefler. (1998) "On the Development of Xenophobia in Germany: The Adolescent Years," Journal of Social Issues 54, no. 3: 585-602. http://search.proquest.com/docview/38687303?accountid=8285.

Braunthal, Gerard. 2009. Right-Wing Extremism in Contemporary Germany. Great Britain: Palgrave Macmillan.

Dobbs, David. 2011 "Beautiful Teenage Brains," National Geographic 220, no. 4: 49. Washington: The National Geographic Society.

Fertig, Michael and Christoph M. Schmidt. 2008. "Attitudes towards foreigners and Jews in Germany: Identifying the determinants of xenophobia in a large opinion survey," Review of Economics of the Household 9, no. 1. http://search.proquest.com/docview/874894628?accountid=8285.

Hagan, John, Susanne Rippl, and Klaus Boehnke. (1999) "The Interest in Evil: Hierarchic Self-Interest and Right-Wing Extremism among East and West German youth," Social Science Research 28, no. 2: 585-602. http://search.proquest.com/docview/61570954?accountid=8285.

Hoffmeyer-Zlotnik, Jürgen H. P. 2005. ☐Der Einfluss der Region auf Einstellungen zu Ausländern,☐ GESIS Leibniz-Institut für Sozialwissenschaften 5. http://www.gesis.org/fileadmin/upload/forschung/publikationen/gesis_reihen/ Blickpunkt/5/hoffmeyer.pdf.

Legge, Jerome S. 2003. Jews, Turks, and Other Strangers: The Roots of Prejudice in Modern Germany. Madison: The University of Wisconsin Press.

Lüdemann, Christian. 2005. „Die Erklärung diskriminierender Einstellungen gegenüber Ausländern, Juden und Gastarbeiter in Deutschland. Ein Test der allgemeinen Attitü dentheorie von Fishbein: Blickpunkt Gesellschaft: Deutsche und Ausländer: Freunde, Fremde oder Feinde? Empirische Befunde und theoretische Erklärungen," GESIS Leibniz-Institut für Sozialwissenschaften 5. http://www.gesis.org/fileadmin/upload/forschung/publikationen/gesis_reihen/Blickpunkt/5/luedemann.pdf.

Pew Research Center. 2009. "The Pew Global Attitudes Project," Pew Global Attitudes Project 8-52. http://www.pewglobal.org/files/pdf/267.pdf

Rippl, Susanne. 2002. „Bildung und Fremdenfeindlichkeit: Die Rolle schulischer und familialer Sozialisation zur Erklärung von Bildungsunterschieden im Ausmaß von fremdenfeindlichen Einstellungen," Kölner Zeitschrift für Soziologie und Sozialpsychologie 54, no. 1. http://www.springerlink.com/content/06747w060p1jw638/.

Schmid, Carol. 1995. "Soiled Identities: Anti-Foreigner Political Violence, Structural Location and Social Action in Contemporary Germany," Canadian Journal of Sociology, 20, no. 2: 227-244. http://www.jstor.org/stable/3341006.

Universität Duisburg. 2006. "Datenhandbuch Allgemeine Bevölkerungsumfrage der Sozialwissenschaften 2006," Gesis Leibniz-Institut für Wissenschaften. http://www.uni-due.de/imperia/md/content/bildungswissenschaften/sowi/prust/allbus_2006_dhb.pdf.

Wagner, Ulrich and Rolf van Dick. 2001. "Fremdenfeindlichkeit ‚in der Mitte der Gesellschaft': Phänomenbeschreibung, Ursachen, Gegenmaßnahmen," Zeitschrift für Politische Psychologie 9: 41-54. http://www.online.uni-marburg.de/isem/WS02 03/prots/ v9.htm.

Wagner, Ulrich, Rolf van Dick, and Andreas Zick. 2000. "Sozialpsychologische Analysen und Erklärungen von Fremdenfeindlichkeit," Zeitschrift für Sozialspsychologie 32, 3-37. http://www.online.uni-marburg.de/isem/WS02_03/docs/fremd1.pdf.

THE STATE'S STRUGGLE TO MASTER ASYMMETRICAL WARFARE

Joe Wisniewski

Abstract

The last decade of American military policy has been dedicated to fighting an enigma –how to wage war against an enemy that does not think, act, or fight like we do; an enemy that wears no uniform, utilizes any tactic, and swears its allegiance not to a government, but an ideology. However, this question has not just troubled America today in the twenty-first century. It has troubled every governmental entity since the city-state of Athens fought Melos over two thousand years ago. This enigma is asymmetrical warfare.

The only way to truly study asymmetrical warfare is to take into account its long history. Thus, this paper utilizes a dataset that contains almost two hundred wars fought since 1817 in order to measure the relationship between the duration of asymmetrical war and the state's chances of victory. The results showcased little difference in the state's percentage of victory for short and medium length wars. For wars over three years, the chances of victory for the state plunged by thirty-one percent. This "three year switch" fits into existing models on how terrorism is effectively evolving to combat the state and provides another clue in the state's struggle to master asymmetrical warfare.

Purpose and Overview

The aircraft hovered over an old abandoned home in the deserts of rural Afghanistan. Inside, a group of insurgents braced themselves. Hours before, a convoy of trucks had been sprayed by gunfire. The insurgents responsible had fled to a small village miles away and sought refuge. They could hear the motor and knew what was to come. A split second later, the house exploded. Ironically, the year was not 2012, but 1918 as the British desperately held onto their crumbling empire. Nor was the attack conducted by an American drone, but with what the British considered a piece of untested technology that would revolutionize warfare – the airplane. The similarities between the American drone campaign against terrorism and the British Empire's "air control" doctrine are striking. They serve as a reminder that the clash of terrorists and insurgents against the state is an age-old problem that troubled the ancient city-state of Athens in its war against Melos as much as it does America today. Such wars are better known as asymmetrical wars. Lowther's defines asymmetrical warfare as follows: "It involves [a state] attempting to counter a style of warfare that is alien and unfamiliar to them conducted by an opponent that would not be able to compete if it fought in the same way that the [the state] preferred" (2007). By using Lowther's work as a foundation, this paper seeks to uncover the relationship between the length of asymmetrical warfare and its effect on the outcome of the war. Buried underneath these forgotten wars are clues to how the state can master this form of war. This paper attempts to discover some of these clues.

This study's hypothesis was that as asymmetrical wars get longer, the state's chances of victory dramatically decrease. The study's dependent variable was the outcome of the war, and the independent variable was the length of the war. I controlled for the type of war (colonial or imperial), who initiated the war, and whether or not another state intervened. The dataset used was the "extra-state warfare" set from the "Correlates of War" project. It contains almost two hundred asymmetrical wars going back all the way to 1817. Started by David Singer, an internationally recognized scholar in international politics, in 1963, the project has gone on to influence hundreds of political scientists. The creation of the project alone dramatically increased the quality of the University of Michigan's world politics program, and is considered one of the most reliable sources on the subject (2009).

When I ran a crosstabulation and chi-square tests on my variables, I discovered that the hypothesis was correct. As the war got longer, the state's chances of victory decreased. What I did not expect was how rapidly this transition would occur. There was virtually no difference in chances of victory for any war shorter than three years. However, if a war were to last longer than three years the state's chances of victory fell by 31%. It was almost as if a "three year switch" had been activated. I discovered that these findings worked in tangent with other scholars studies of asymmetrical warfare, explaining how insurgent groups around the world are evolving to effectively combat the state.

Literature Review

A Flawed View of Asymmetrical Warfare

As a line of British infantry men slowly marched forward on an open field, a group of American militiamen did something radical for the time period. Rather than marching in formation and fighting the world's strongest military head-on they utilized the forest as cover. Slowly, they picked off the British infantry until the enemy force collapsed. During our own revolutionary war, American militiamen engaged in what today is better known as "asymmetrical warfare." Ironically, these very tactics are being used against our forces in Afghanistan. The purpose of this literature review is to the guide the reader through the historical, theoretical, and empirical perspectives of the study of this unique form of war. In constructing this literature review, I discovered a gap in the data and research. Few studies have looked at the history of asymmetrical war as a whole, and none have focused solely on testing the relationship between the length of war and the state's chances of winning over hundreds of asymmetrical wars.

This study, and the theory it is trying to investigate, stems from a wealth of past research on what has been colloquially termed the "mathematics of war." Numerous studies have shown that there is a direct relation between insurgencies in asymmetrical war and patterns in the data that emerges from every suicide bombing, to each individual firefight between terrorists and the state (Gourley et al. 2009; Cederman 2002; Johnson et al. 2005; Johnston 2009). Throughout these studies, each team cited Lewis Richardson's trendsetting essay which first discovered war's relationship with power laws (1948). If the major wars of the 20th century were to be placed into a power law graph, the line would be diagonal, plotting major wars with less frequency and those of low intensity to be much more frequent. Richardson's study was just the beginning; soon physicists, military officers, and economists, banded together to develop models to explain the order that was appearing in the data. Considering that Richardson's conclusion states that low-intensity war or asymmetrical warfare will be more com-

mon, it is important to deploy statistical analysis to discover whether the state's attempts to master asymmetrical warfare are succeeding.

Power Laws and War

The empirical study of asymmetrical warfare embraces a little-used concept in political science – power laws. Power laws, according to Arthur Spirling, suggest a direct relationship between the frequency of an event and its size (2006). In other words, political scientists can look at the data of any war and accurately summarize its outcome, or even theorize and attempt to predict future events. War is one of the few subjects that have seen power laws used frequently. Armed with such knowledge, numerous studies have utilized power laws to discover that insurgents[1] across the world operate in extremely similar ways.

Using the frequency of attacks and the number of causalities inflicted, Johnson et al. discovered that the counterinsurgency wars being waged in Colombia and Iraq showed the same power-law behavior (2005). In other words, the insurgents in both wars were executing the same model of war. They had evolved to effectively fight the state. In the study, both the insurgents in Colombia and Iraq had a very similar frequency of attacks. There were very few large attacks, but thousands of light "hit and run" attacks that slowly weakened the state (2005). For Johnson's team, this was a shocking development because the wars in Colombia and Iraq were started for different reasons, in geographically distinct places.

Taking this further, Sean Gourley et al. discovered the same phenomena in their study, except that they collected data from a much larger dataset and applied the power law. After reaffirming the study by Johnson's team, they continued to form a model for terrorist behavior. They theorized that insurgents who survive the onslaught of military power by the state have developed organizational structures that are united enough to effectively fight the state, but fragmented enough that they can never be easily targeted (2009). When they analyzed the power law relationship in the global war on terror, they discovered that Al Qaeda had developed such an organization model (2009).

Cederman details a practical analogy for power laws. In his study, he found that traditional ways of looking at war see world politics as billiard balls, when one ball slams into another it causes a chain effect. Power laws are much more like moving sand piles. Individually grains of sand shift in a pile, barely changing the status quo. Over time, however, these individual grains can create an avalanche that translates into significant political ramifications (2003). His analogy explains how a series of well timed, but small terrorist attacks can create massive power shifts. For instance, during the initial invasion of Afghanistan, the Taliban and Al Qaeda insurgencies were initially wiped out. However, over time, their collective hit and run tactics completely changed the tide of the war.

Based on the empirical studies listed above, the general consensus is that insurgents show universal patterns of behavior in asymmetrical warfare. In order to survive fighting against the state, insurgencies become fragmented enough so that they are hard to target and united enough that they can mount efficient counterattacks.

1 This paper accepts Bard O'Neil's definition on the relationship between insurgency and terrorism. O'Neil defines insurgency as "a struggle between a non-ruling group and the ruling authorities in which the non-ruling group consciously uses political resources and violence to destroy, reformulate, or sustain the basis of legitimacy of one or more aspects of politics" (1990). One such tactic of insurgents is terrorism. In other words, in today's conflict against terrorism the lines between terrorists and insurgents can be hard to distinguish. As a result, "terrorist" and "insurgent" are used interchangeably in this paper.

The Rich History of Asymmetrical Warfare

The historical perspective of asymmetrical warfare destroys the popular notion that the wars facing America today have no comparison and reveals why victory can be so difficult to achieve for the state. This notion emerges from America's historic short-term memory. Corum and Johnson compiled a detailed history of this forgotten past in Airpower in Small Wars (2003). The work points to America's experience in pursing Mexican rebel forces in 1916 by the U.S Army, the U.S. Marines fighting Dominican army irregulars in 1916, or the long asymmetrical war in Nicaragua that lasted for over a decade with over nine interventions (2007).

By 1940, the U.S. Marines had so much experience in asymmetrical warfare that they published the Small Wars Manual, which directly warned future military officers that the political and economic spheres were just as important, if not more so, than military victories in order to win in asymmetrical warfare (1940). Some chapters in the manual read as if it was written in the twenty-first century, until one turns the page and discovers a chapter on how to care for military horses.

The Tet Offensive highlighted this disparity between military might and political will. On one hand, the attack completely surprised the American forces, but was quickly contained, inflicting massive casualties on the communist North Vietnamese army. However, from a political perspective, the offensive turned the American people against the war. This historical example suggests that because the state actor is already seen as a more legitimate force, the standards of victory on both the military, economic, and political fronts are much higher than those of an insurgency.

In Sarah Sewall's introduction to the U.S. Army and Marine Corps' Counterinsurgency Field Manual, she directly calls into question the definition of victory for a state actor in asymmetrical warfare. Some analysts, particularly neoconservatives, believe in unleashing the full power of the United States military to completely destroy insurgencies and establish unquestionable victory. It is a black and white view on a complex type of warfare. Sewall counters that this "rejects the central truth that counterinsurgency is largely a political exercise. It also demands that Americans abandon their core values. To save ourselves, we would destroy our souls" (2007). This is one reason why the standards of victory are much higher for state; they are the legitimate actor with a set of core values; they are the ones who must answer to the global community if they commit horrific war crimes.

Bruce Hoffman, the Director of the Center for Security Studies at Georgetown University, further explains this higher standard of victory. According to Hoffman and Moshe Ya'alon, the former Chief of Staff of the Israel Defense Forces, insurgents and terrorists see states within the context of the "Spider-web theory." Like the state, spider webs appear to be strong and stable, but a simple motion of one's hand can cause the entire web to collapse. In other words, insurgents see citizens in the Western world as "self-satisfied, comfortable, and pampered to the point where they had gone soft" (2006, 64). When the Spider-web theory is combined with the democratic Western world, it gives insurgents a further advantage of eroding the public's support, making it easier to manipulate the standards of victory in their favor.

Is Asymmetrical War "New" or a Repeat of the Past?

Finally, the theoretical perspective of asymmetric warfare further erodes the many misconceptions about insurgents. John Robb illustrated one such misconception. Robb believes we are entering

a "new" era of war. He argues that asymmetrical warfare has become empowered by globalization, adding to the misrepresentation of this "new" form of war. Insurgents utilized what is called "system disruption" to exploit the world's connectivity (2007). For instance, destroying an oil refinery has ripple effects not just in the target country, but also across the world. In the 1920s, America fought insurgents in Nicaragua who used similar tactics (Corum and Johnson, 2003).

Going a step further, the U.S. Army and Marin Corps Counterinsurgency Field Manual (2007) directly explains the theoretical paradoxes of counterinsurgency campaigns. For instance, the manual states that "some of the best weapons for counterinsurgents do not shoot" or "sometimes, the more force is used, the less effective it is" (2007, 49). There is no doubt that globalization has heightened the lethality of insurgents, but the U.S. military disagrees with Robb's bold hypothesis. By understanding that these wars are not "new" but "different," the military had begun unraveling the puzzle, but many of these new theories came after years of intense fighting in Iraq and Afghanistan. Sadly, the counterinsurgency manual does not cover whether or not the length of war will affect its outcome. The work focuses on the theory of counterinsurgency and the practical application of such ideas in the field.

After reviewing the current literature on asymmetrical warfare, it is suggested that my study design is unique, for few studies take into account the asymmetrical wars that go back centuries. Many studies describe complex models for how terrorists operate, but these models do not go into much detail about how the terrorists reach that point. In addition, the historical evidence suggests that there will be a direct relationship between the length of a war and its outcome. There is room within the literature for a study on the length of war to add to the discussion.

Study Design

Theory and Expectations

The following study design focuses on the following hypothesis: in comparing asymmetrical wars, those that are shorter in duration will be more likely to favor victory by the state than conflicts that are longer in duration. The null hypothesis of this research is: in comparing asymmetrical wars, conflicts that are shorter in duration will not have an impact on the state's chances of victory.

Consistently, each study in the literature review developed models that described insurgencies as self-organized groups, which constantly evolve and adapt to the state's tactics on the battlefield in order to survive (Gourley et al. 2009). This study design theorizes that such an insurgent group is designed from the ground up to trap the state in a long lasting war of attrition. This is especially effective against democracies, where long, bloody, and costly asymmetrical wars can turn the public against their leaders (Johnston 2009).

Since wars of attrition are unattractive to most militaries, many states attempt to set limited objectives and focus solely on counterterrorism rather than nation building. Such tactics follow the recommendations listed in Airpower in Small Wars, which analyzed the use of air forces to fight insurgencies throughout the 20th century (Corum and Johnson 2007). The study design seeks to show that by following such steps, states can limit their role in asymmetrical warfare and employ a "get in and get out" attitude, and thus significantly boost their chances of victory. This hypothesis is based on the assumption that the state tries to avoid a long-term war, as they have very limited resources, with

a public that apply pressure regardless of government type. Based on these recommendations, and the notion that insurgencies purposefully organize themselves so that they can slowly bleed out the state, this study seeks to investigate just how effective shortening asymmetrical warfare is for the state.

Operationalization and Measurement of Concepts

This study will be based on the "Correlates of War" Project and utilize the "extra-state war" dataset. This dataset tracks asymmetrical warfare from 1817 until 2007 (Sarkees and Wayman 2011). The dependent variable will be the "outcome" of the war. Outcome is coded into seven different possibilities: victory for the state, victory for the non-state actor, compromise, the war changes into another type of warfare, the war is ongoing as of 2007, stalemate, and the conflict has lessen in intensity so much so that it fails to be classified as a war. In the study, the researchers determined if the state won based on "common knowledge" at the time. Such information was taken from newspapers, military reports, actual battlefield reports, and other sources. Because outcome has seven different elements it is a nominal-level variable.

Our independent variable will be the length of time, in days, that the war lasted. The "Correlates of War" study breaks down the duration of the war based on the following variables: startday1, startmonth1, startyear1, along with the corresponding end for the first period of fighting. Since asymmetrical warfare tends to see cycles of intense fighting, the study broke these variables into groups of start and end periods. Thus, other variables included startday2, startmonth2, and so on, which represented a return to fighting after a brief period of peace. The "Correlates of War" considered the "start" of a war based on when actual physical fighting occurred. As for the final "end," the project determined the ending based on the signing of peace agreement, retreat, or destruction of all enemy forces. No project, however, gives perfectly impartial data. Considering the vast amount of information, it is quite possible that the start and end dates may be inaccurate. However, considering the reputation of the "Correlates of War" project, and its existence for almost half a century, there is no better source to turn to.

This study wishes to take this information and condense it into one single variable: duration (in days) for every war in the study. Thus, on each war, I simply added together the total amount of days of the war. From there, I recoded the duration into an ordinal variable with three categories: "short wars" which will range from one to one hundred days, "medium wars" which will range from one hundred days to three years, and "long wars" which will last longer than three years. The longest war in the study was the Angolan-Portuguese War from 1961 to 1974, for a total of thirteen years.

Research Design

The "Correlates of War" project provides one of the most extensive data collections on war. The particular dataset being used contains almost two hundred extra-state wars from almost two centuries of warfare (Sarkees and Wayman 2011). The research design revolves around a chi-square test to evaluate the relationship between the two nominal variables while controlling for whether the war was "colonial" or "imperial" in nature, whether the war was started by the state (the initiator of the war), and finally whether or not other states intervened.

"Colonial" wars in the study involve a state engaging in warfare for the sake of defending territory in the empire. A good example would be the British tactic of "air control" – the use of air power

to bombard a population into submission – against insurgents in what was then its territory in Iraq in the 1920s. "Imperial" wars on the other hand, involve a state invading a territory for the sake of conquering it militarily, culturally, and/or economically. For instance, the dataset considers the American war in Iraq to be an "imperial" war. The study design seeks to see if states have historically performed better in colonial wars when placed in a more defensive role, rather than an offensive role in imperial wars (Sarkees and Wayman 2011).

This study design will utilize the chi-square test and run crosstabulations. This test will showcase whether the null hypothesis has any standing and assists in discovering the goodness-of-fit between what is observed in the data and what the study design expects. First, I will run a chi-square on my main independent and dependent variable. Following this, I will employ the same tests on my controls to see if there is any statistically significant relationship. The chi-square test is one of the best possible methods to discover the probability of state victory given certain variables. In addition, if the null hypothesis is correct, it would be possible to convert other variables into nominal ones and run the test again to attempt to uncover what exactly assists the state in winning asymmetrical wars.

Analysis and Conclusion

Analysis

In the previous sections, I predicted that the longer the state engages in asymmetrical warfare the less likely they will achieve victory. The notion was that as states expand their objectives in an asymmetrical war, such as state building and spreading democracy, they leave themselves vulnerable to becoming trapped in their own goals as a war of attrition sets in. Using the extra-state Correlates of War dataset, I ran a crosstabulation on the relationship of the duration of the war compared to the outcome of the war.

As stated before, the dataset splits outcome into seven groups. "Side A Wins" represents a victory for the state, and "Side B Wins" represents a victory for a non-state actor. I decided against viewing the outcome of the war in black and white. Due to the research done by the Counterinsurgency Field Manual, Bruce Hoffman, combined with the practical experience of Moshe Ya'alon, and the "Spiderweb theory" discussed in the literature review, it is highly supported that the standards of state victory are much higher than those of an illegitimate insurgency.

By applying this research to the "Correlates of War", I considered the following values as losses for the state: the insurgents earn a clear victory, a compromise, having the war transfer into another type of war, the war is ongoing as of 2007, and a stalemate. If the state must compromise with a non-state actor, the legitimacy of the government is potentially ruined, resulting in a political defeat. If the war is transformed into another type of war, it means the insurgency has amassed so much support that they can engage the state in conventional battle. Thus, the state has failed to contain their opponents, and this once again represents a form of defeat. The final value is wars that are ongoing as of 2007. These wars are the recently ended war in Iraq, and the current war in Afghanistan. The war in Iraq recently ended with the United States pulling out of the country with a list of objectives not accomplished, leaving behind a fragile government. Afghanistan's future is in jeopardy. With a full-scale withdraw planned for 2014, Afghanistan's military still barely functions and our own soldiers are being shot by Afghan military-trainees in horrific "green-on-blue" situations. Thus, both wars fall under

the categories of defeat for the state or stalemate, and I considered these as a victory for the non-state actor. Finally, I considered stalemate as a victory for the non-state actor since the state's inability to end a war against insurgents also ruins its legitimacy.

At first, it may appear that I am stacking the deck in favor of my hypothesis by considering six out of the seven outcomes in the dataset as victory for the insurgency. However, considering the mass differences between the well-armed, well-funded, and politically legitimate state, and the typical underfunded armed forces of an insurgency, I stand by my assessment. Furthermore, the state is far more vulnerable to defeat because it has so much more to lose than an insurgency, which has everything to gain by winning, at any cost. This was seen in the works of Sewell and the spider-web theory. Thus, the only way for a state to achieve victory over an insurgency is to completely defeat them. For the insurgents, however, the threshold of victory is much smaller since they have little to lose.

After running a chi-square test, I can reject the null hypothesis that there is no relationship between the length of a war and the states chances of victory. With a p-value of .000 it is clear that a relationship exists between my independent and dependent variables. My Pearson Chi-square value totaled at 50.515, a very high rate that reinforces the p-value. The R square PRE measure of association was .075, giving the relationship a "weak" strength. The chi-square test suggests that the chances of state success after three years of war drops dramatically. Out of fifty long asymmetrical wars, only nineteen nations have achieved victory since 1817.

My results, however, held a few surprises. Ironically, proportionally speaking, states have fared equally well in both short and medium length asymmetrical wars. In asymmetrical wars lasting less than hundred days (termed as "short") the state won 72% of the 96 wars in this group. For wars lasting between hundred days and 3 years (termed as "medium") the state won about 69% of the 51 wars in this group. Before I ran my test, I had assumed that short wars would show an overwhelming percentage of state victories, whereas medium length wars would show a decrease in state victories. This did indeed occur, but by a minor three percent. In war a switch seems to be triggered after three years of warfare. The question is what is this switch that sees a dramatic drop to only a 38% chance of victory?

To further test these results, I selected three control variables: the type of war, whether another state intervened in the war, and whether the state started the war. The most dramatic conclusions emerged from the type of war. The dataset considered wars like the U.S. invasion of Iraq as imperial and other wars such as the British Empire's air control wars as colonial. Imperial wars show a significant increase in the state's chances of victory during medium wars. This may occur because the insurgency has not been able to effectively rally the support of the local population. Colonial wars follow my original hypothesis, but the "three-year switch" effect is not as dramatic. This may be related to the fact that in a colonial war the state has already established a framework or working relationship with the local population. The other two controls show supporting evidence for my original hypothesis. The only control that was not significant was the not having another state intervene in an asymmetrical war.

The Three Year Switch

Carl von Clausewitz once said that "in war even the simple things are difficult" (in Corum and Johnson, 2003, 425). The "simple" task of putting down an insurgency, according to Corum and

Johnson in their historical and theoretical analysis of asymmetrical war starts with a comprehensive strategy. By establishing strategy for not just for the military sphere, but social and economic spheres of asymmetrical war, the state increases their chances of victory (2003, 425-427). Time and time again, the state assumes that asymmetrical warfare can be won in the military sphere alone□, for instance Vietnam. Almost exactly three years into the war, the Vietcong insurgency launched the Tet Offensive. As stated previously, the attack itself was a massive military victory for the United States. However, back home in the United States it enraged the public, and in Vietnam itself the local populace began to show signs of turning against the Americans. By failing to remember the other sides of asymmetrical warfare, it can be argued that American had set itself up for failure.

Johnston (2009) analyzes the effectiveness of killing the leadership of an insurgency. His research suggests that if the state focuses on decapitation of an insurgency's leadership, this will increase the chances of state victory by 46% (2009). The removal of leaders in an insurgency can decrease the length of the war as well. By surgically targeting the enemy, limiting the objectives, and adopting a "get in and get out" strategy, the state can increase the likelihood of victory.

These results also fit into the models created by many scholars that showcase insurgents as organic decentralized groups that find a delicate balance between unity and fragmentation (Gourley et al. 2009). By being united but fragmented, insurgencies can strike their targets and remain obscure. As Gourley and his team summarize their model as seeing insurgents as an "ecology of dynamically evolving, self-organized groups following common decision-making processes" (2009, 1).

It is this model of organic organization that makes insurgents so deadly. The question of what triggers the so-called "three year switch" remains empirically unanswered and requires additional avenues of research. But, if I were to make another hypothesis, it would be the suggestion that the "three year switch" and the work of scholars like Gourley are directly related. These insurgent groups reach this deadly combination of fragmentation and unity after three years of continuous warfare. The R-square measure of my study showed a weak relationship between the duration of war and the outcome of it, suggesting that the length of war activates other variables, such as the organization model, that decrease the state's chances of winning. If an insurgency can last this long in battle against the state, it has the funding, weaponry, and most importantly, human capital to pull off a war of attrition. In other words, insurgents can evolve to effectively fight against the state and win. Once this stage is activated, the state's political will or resources for war will deplete. This organically organized model could also explain why there is relatively no difference for the state's chances of success between "short" and "medium" length wars, since it seems that insurgent groups reach this level of organization after three years.

In the state's quest to master asymmetrical warfare, it would be suggested that the state adopt strategies to prevent insurgents from finding the "sweet spot" between unity and fragmentation. By pursuing a limited agenda that embraces a "get in and get out" mentality, with no nation building plans or occupation of the targeted country, the state can increase their chances of victory within three years. By providing empirical evidence that suggests a so-called "three year switch," this study advances our understanding of asymmetrical war by a slight extent, and strengthens the models created by other scholars.

Bibliography

Bard e. O'Neill, Insurgency and Terrorism: Inside Modern Revolutionary Warfare Washington, DC: Brassey's inc, (1990): 13.

Cederman, Lars-Erik. "Modeling the Size of Wars: From Billiard Balls to Sandpiles." *American Political Science Review*. 97. no. 1 (2003): 135-150. http://journals.cambridge.org/action/displayFulltext?type=1&fid=142726&jid=PSR&volumeId=97&issueId=01&aid=142725 (accessed February 17, 2012).

Clauset, Aaron. "On the Frequency of Severe Terrorist Events." *Journal of Conflict Resolution*. 51. no. 1 (2007): 58-88. http://arxiv.org/pdf/physics/0606007v3.pdf (accessed February 17, 2012).

Corum, James, & Johnson, Wray. Airpower in Small Wars: Fighting Insurgents and Terrorists. University Press of Kansas, 2003.

Gourley, Sean, Bohorquez, Juan, Alexander Dixon, Michael Spagat, and Neil Johnson. "Common Ecology Quantifies Human Insurgency." *Nature*, December 17, 2009. http://www.nature.com/nature/journal/v462/n7275/pdf/nature08631.pdf (accessed February 17, 2012).

Hoffman, B. (2006). The logic of suicide terrorism. In R. Howard, J. Forest & J. Moore (Eds.), *Homeland Security and Terrorism*New York : McGraw-Hill.

Johnson, N., Spagat, M., Restrepo, J., Becerra, O., Camilo, B., Suarez, N., Restrepo, E., & Zarama, R. Universal patterns underlying ongoing wars and terrorism, 2005.

Johnston, Patrick. "The Effectiveness of Leadership Decapitation in Counterinsurgency." *International Security and Social Science Seminar* . 2009: 1-53. http://iis-db.stanford.edu/evnts/5724/Johnston_-_Decapitation_(CISAC).pdf (accessed February 17, 2012).

Lowther, Adam. Americans and Asymmetrical Conflict: Lebanon Somalia, and Afghanistan. Westport, CT: Praeger Security International, 2007.

Richardson, Lewis F. 1948. "Variation of the Frequency of Fatal Quarrels with Magnitude." American Statistical Association 43: 523-546.

Robb, John. Brave New War: The Next Stage of Terrorism and the End of Globalization. Hoboken, NJ: John Wiley & Sons, Inc, 2007.

Spirling , Arthur. 2009. "The Next Big Thing: Scale Invariance in Political Science". Retrieved from http://www.mendeley.com/research/next-big-thing-scale-invariance-political-science/

University of Michigan. (2009). David singer. Retrieved from http://sitemaker.umich.edu/jdsinger/home.

U.S. Army, Marine Corps. Counterinsurgency Field Manual. Chicago, IL: The University of Chicago Press, 2007.

Tables and Figures

Figure 1: Main Test: Outcome and its Relationship to Duration of the War

Outcome	"Short" War	"Medium" War	"Long" War	Total
State Wins	72%	69%	38%	123 wars
Insurgents Win	28%	31%	62%	74 wars

Measure	Value
Pearson Chi-square	50.515[a]
P-Value	.000
Cramer's V	.358 With a P-value of .000
Lambda	.097 With a P-value of .002

Figure 2: Control for type of war and the outcome

Colonial:

Outcome	"Short" War	"Medium" War	"Long" War	Total
State Wins	79%	54%	32%	43 wars
Insurgents Win	21%	46%	68%	74 wars

Pearson Chi-square: 16.347

P-value of .090

Imperial:

Outcome	"Short" War	"Medium" War	"Long" War	Total
State Wins	69%	81%	25%	80 wars
Insurgents Win	31%	19%	75%	51 wars

Pearson Chi-square: 50.498

P-value of .000

Figure 3: Control for additional state involvement in the war

No additional state involved:

Outcome	"Short" War	"Medium" War	"Long" War	Total
State Wins	74%	76%	64%	106 wars
Insurgents Win	26%	24%	36%	51 wars

Pearson Chi-square: 7.795

P-value of .454

Additional state involved:

Outcome	"Short" War	"Medium" War	"Long" War	Total
State Wins	60%	33%	18%	17 wars
Insurgents Win	40%	67%	82%	35 wars

Pearson Chi-square: 19.635

P-value of .033

Figure 4: Control for the state starting the war

State didn't start war:

Outcome	"Short" War	"Medium" War	"Long" War	Total
State Wins	71%	63%	43%	68 wars
Insurgents Win	29%	37%	37%	43 wars

Pearson Chi-square: 19.906 and a P-value of .069

State did start war:

Outcome	"Short" War	"Medium" War	"Long" War	Total
State Wins	72%	79%	30%	55 wars
Insurgents Win	28%	21%	70%	31 wars

Pearson Chi-square: 48.302

P-value of .000

ACKNOWLEDGMENTS

Clocks and Clouds is a highly collaborative project among dozens of vital participants, and the journal owes a great debt to everyone involved. Among these collaborators, several deserve particular recognition for their active role in supporting and guiding the journal. Professor Kimberly Cowell-Meyers and Professor Dylan Craig deserve singular recognition for their continued role in advising the student staff and acting as advocates in the faculty. We are incredibly thankful to both Associate Dean Meg Weekes and Associate Dean Patrick Jackson for their support, as the collaboration between SPA and SIS would not be possible without them. The SPA and SIS Undergraduate Councils have also done remarkable work to build support among the student body.

We also owe particular gratitude to members of the American University community who have provided valuable advice and support as the journal has grown. Dr. Lyn Stallings in the Office of Undergraduate Studies has provided us with incredible opportunities to expand our name and audience across campus. We have also been excited to connect with the Honors Office through Dr. Michael Manson and R.J. Peterson, who have been instrumental in helping us reach out to talented authors. Sara Ghebremichael, James Helms, Jacqueline Corbett, Matt Bourdon, and Clement Ho have provided equally crucial advice on managing and marketing the journal.

Finally, the thirty-five students who submitted work to Clocks and Clouds deserve recognition, as well as the nearly thirty student staff and review board members who worked tirelessly to see this issue published. The articles we are able to publish represent only a small portion of the excellent research conducted by American University undergraduates, and the tremendous response the journal has received continues to validate our mission and push us forward.

ABOUT THE JOURNAL

Clocks and Clouds is an American University undergraduate research journal that publishes articles on the cutting edge of political science, international studies, and public policy. The journal is meant to add a voice to the intellectual dialogue both within the American University community and in broader academia. Our name comes from the work of philosopher Karl Popper, where clouds are a metaphor for the disorderly and irregular in social science while clocks represent the predictable and rational. By providing a venue for top undergraduate research, *Clocks and Clouds* aims to find the clocks amidst the clouds.

The journal is organized as an independent student-run joint venture between the School of Public Affairs, the School of International Service, the School of Public Affairs Undergraduate Council, and the School of International Service Undergraduate Council. American University undergraduates of any major may submit work for publication and will have their work assessed through a blind peer review and revision process. *Clocks and Clouds* publishes one issue per semester in print and electronic formats and appoints staff and editorial reviewers for one-year terms.

For more information, or to learn about participating in the journal as an author, staff member, or editorial reviewer, contact the editor at clocksandclouds@american.edu or visit www.american.edu/clocksandclouds.

All clouds are clocks- even the most cloudy of clouds.

Karl Popper