# ㄷ ( Research Journal 

## Volume: III Spring 2019 Issue: I



Integrative and multidisciplinary undergraduate research at the leading edge of the Arts and Sciences and Business Published by the Honors Program at Bentley University

# The Bentley Undergraduate Research Journal 

Editor<br>Aaron L. Jackson - Economics<br>\section*{Associate Editors}<br>Otgontsetseg Erhemiamts - Finance<br>Jeff Gulati - Global Studies<br>Christian Rubio - Modern Languages<br>David Szymanski - Natural and Applied Sciences<br>Executive Board<br>Miriam Boeri - Sociology<br>Deborah Gregory - Finance<br>Danielle Hartigan - Natural and Applied Sciences<br>Fred Ledley - Center for Integration of Science and Industry<br>Michael Quinn - Economics<br>Adina Sklar ’19-Economics/Finance<br>Euthemia Stavrulaki - Management<br>\section*{Production and Editorial Assistance}<br>Melissa Rush, Matthew Dimond

## Business and Editorial Correspondence:

Bentley University
Honors Program
175 Forest Street
Waltham, MA 02452
fusio@bentley.edu
www.fusiojournal.org

## Volume III Spring 2019 Issue I

Articles
Editor's Introduction - Politics and PolicyJeff Gulati3
Authoritarianism and Populism in American Politics Michael Acampora ..... 9
When P*ssy Grabs Back: An Examination of the Gender Gap in the 2016 Presidential Election
Katie Gilroy ..... 51Agenda Setting: The Barriers to Preventative Healthcare Issue Attentionin the United States Congress
Jennifer Corso ..... 72
Measuring the Effect of Demographic, Economic, and Political Factors on
Voter Turnout in the 2016 Presidential Election
Ryan Amelio ..... 94

## Aims and Scope

Established following Bentley University's mission of creating impactful knowledge within and across business and the arts and sciences, Fusio is a multidisciplinary undergraduate journal committed to the dissemination of original, high-quality undergraduate research. The journal is published by Bentley University's Honors Program and edited by both students and faculty across disciplines. Fusio encourages submissions from undergraduate students, with an emphasis on articles that span both business and arts and sciences topics as well as multidisciplinary topics. The journal is currently open only to undergraduate students at Bentley, and will consider original research by students as well as student/faculty joint work. All submissions undergo a blind peer review process.

Fusio is published twice yearly, in the fall and spring. For subscription information, please contact the Honors Program at Bentley University, or the journal office at fusio@bentley.edu. Online open access to these articles may also be found at www.fusiojournal.org.

Copyright © 2019 by Bentley University. Printed by Quad Graphics. Permission is granted to reproduce articles published in this journal, so long as reproduced copies are used for non-profit, educational, or research purposes. No responsibility for the views expressed by the authors in Fusio is assumed by the editors, by the publisher, or by Bentley University.

## Acknowledgements

We gratefully acknowledge the contributions of our reviewers in supporting Fusio and the authors in ensuring the highest standards of academic quality. The authors have benefitted tremendously from their time and insightful comments, so we thank you.

# Introduction: Politics and Policy 

By Jeff Gulati*

The 2016 presidential campaign was by far the most unconventional presidential campaign in recent history that culminated with the unexpected result of Donald Trump defeating Hillary Clinton and becoming the $45^{\text {th }}$ President of the United States. While election scholars will be studying the reasons underlying the outcome for years, the early consensus among political analysts and campaign professionals is that the 2016 presidential election was one that broke almost all the rules on how to run a winning campaign and how academics explain and predict election outcomes.

The Republican Party, which has a long history of nominating "establishment" candidates and in many cases had sought the nomination before, nominated a candidate who had not held any position in government including the military and had never run for office (Hetherington, 2018; Mayer, 2018). It was not even clear how long Donald Trump had been a Republican having made campaign contributions to candidates in both parties over the past two decades (Ross, 2015). Mr. Trump's quest for the nomination was similarly unconventional (Costa, 2017). It began with Mr. Trump descending to the lobby of Trump Tower on an escalator to announce his candidacy coupled with inflammatory rhetoric towards Mexican immigrants (Graham, 2016). He would skip a crucial debate before the Iowa caucuses (Diamond, 2016), spend less on his campaign by Super Tuesday than four of his rivals, and trail miserably in the endorsements by GOP Governors and members of Congress (Currinder, 2018; Hetherington, 2018). Yet he would far outpace the other candidates in the amount of time speaking at the debates and coverage on cable news (Hershey, 2018; Sides et al, 2018).

The Democratic Party, which has nominated a mix of experienced and fresh candidates over the years, nominated one of the most experienced candidates to ever seek the Presidency. Her near lifetime of public service included eight years as First Lady, eight years as the U.S. Senator from New York, and six years as Secretary of State. But she also was the first female ever nominated for President by one of two major parties. This combination cleared the field of any significant opposition at least initially. Her main opposition was Vermont Senator Bernie Sanders, who had never been elected as a Democrat but rather identified as a democratic socialist independent after previously identifying as a socialist when he was Mayor of Burlington (Hetherington, 2018; Mayer, 2018; Sargent, 2017). While Sec. Clinton's march to the nomination was never in doubt, Sen. Sanders proved to be a pesky opponent who did not abandon his campaign until the convention. Along the way, he helped to expose the flaws the Clinton campaign would have going forward, such as a lack of enthusiasm among Democratic

[^0]activists who saw her too cautious and pragmatic and sold out to the establishment. Others were turned off by a perceived entitlement and aloofness and more general likability (Sides et al., 2018)

The two candidates entered the race as the two most unfavorable candidates ever to be nominated by a major party (Holyk \& Langer, 2016). Scandals plagued both nominees. But while explicit revelations of Mr. Trump's bragging about assaulting a woman and constant invectives directed towards critics did little to derail his core support, the past scandals of former Pres. Clinton and the ongoing investigation over her possible sharing of classified materials in private emails prevented Sec. Clinton from expanding her support (Nelson, 2018; Sabato, 2017). The electorate's unfavorable opinion would remain high on Election Day with the exit polls showing only $43 \%$ of voters with a favorable view of Sec. Clinton and only $38 \%$ with a favorable view of Mr. Trump (Mellow, 2018; Sabato, 2017).

The campaigns \& elections rulebook seemed to help little in explaining the decisions of the nominees and consequences during the general election as well. Mr. Trump was slow to run television ads and seemed ill-prepared for the three debates, while Sec. Clinton was late to campaign in key Midwestern battleground states including failing to appear at all in Wisconsin (Hetherington, 2018; Sargent, 2017). Almost every preelection had Clinton winning the popular vote with the Real Clear Politics average of polls showing her winning by a $3.2 \%$ margin (Edwards-Levy, et al., 2017). The leading forecasters also predicted a decisive win for Sec. Clinton including a majority in the Electoral College (Campbell, 2016).

The actual popular vote was largely consistent with the pre-election polls and forecasts. Hillary Clinton won $48.2 \%$ of the nationwide popular vote, while Donald Trump won $46.1 \%$. Clinton's raw vote margin over Mr. Trump was nearly 2.9 million votes out of nearly 136.7 million votes cast. Turnout increased from 2012, 59.3\% from 58\% of eligible voters. American Presidents are elected by the Electoral College, however, which Mr. Trump would win by winning the most votes in 30 states. These states included not only the swing states of Florida, Iowa, North Carolina, and Ohio but also three states-Michigan, Pennsylvania, and Wisconsin-that a Republican nominee had not won since the 1980's. The official vote of the Electoral College was 304 to 277 (Schmidt \& Andrews, 2018) with the most "faithless electors" (seven) casting votes for someone else since 1960. This would mark the fifth time in American history that the popular vote winner was not the winner of the Electoral College and the second time in the last five elections. Coincidently, in each case, it was the Democratic nominee who won the popular vote but could not also win the Electoral College.

While there are many features of the 2016 presidential election that were unconventional and unexpected on the surface, there was considerable evidence preceding the campaign that it would be a close election and that a Republican victory was not at all improbable. President Obama's approval rating on Election Day was 53\%, respectable given a highly polarized electorate but not nearly enough to guarantee a Democratic victory. But even the Vice Presidents of popular Presidents Dwight Eisenhower
and Bill Clinton were unable to win a third term for their party. Since 1952, moreover, only once has one party won three consecutive presidential elections. An improved economy during Pres. Obama's two terms was certainly a plus for the incumbent party, but leading economic indicators were only modestly positive and there remained considerable anxiety and discontent among the electorate over the direction of the country. Among the nine leading election forecasting models that focused on election fundamentals (i.e., presidential approval and the economy) rather than the nominees or the fall campaign, only four predicted a clear Democratic majority of the two-party vote, while two predicted a clear Republican majority. The remaining three predicted a very narrow win for the Democrats (Campbell, 2016).

Despite talk about the historic or unprecedented nature of the election and unconventional candidacy and campaign of Donald Trump, the voting patterns of most American voters at both the individual and groups levels followed similar patterns found in recent presidential elections. The electorate remained evenly divided, with $33 \%$ of Americans identifying as Democrats and $31 \%$ identifying as Republicans. And is typically the case, almost all Democrats ( $89 \%$ ) voted for the Democratic nominee and all Republicans ( $88 \%$ ) voted for the Republican nominee. The significance of partisanship for most voters is illustrated best by noting that Mr. Trump won $46 \%$ of the popular vote although only $38 \%$ of the electorate had a favorable opinion of him. Furthermore, only $38 \%$ of voters said he was competent to be President, only $35 \%$ said he had the right temperament, and only $33 \%$ believed him to be honest and trustworthy (Mellow, 2018; Sabato, 2017).

Independents narrowly voted for Mr. Trump ( $46 \%$ to $42 \%$ ), but they also had voted for the Republican nominee Mitt Romney ( $50 \%$ to $45 \%$ ) in 2012. What changed from 2012 was that $6 \%$ of voters voted for third-party candidates. So while quite a few partisans had concerns about their party's nominee, it was not enough to make them vote for the other party's nominee and instead opted for one of the other candidates (Mellow, 2018; Sabato, 2017).

Similar to 2012 and other recent elections, whites overwhelming voted for the Republican nominee and non-whites voted for the Democratic nominee. There was concern among Republicans that the increase in the Latino population and Mr. Trump's rhetoric and immigration proposals would further erode the GOP's share of the vote from Latinos. But while Mr. Romney lost among Latinos by 44\%, Mr. Trump lost by just $36 \%$. Mr. Trump also closed the gap among African Americans to $80 \%$ from $87 \%$ in 2012 for Mr. Romney. And among whites, Mr. Trump maintained the $20 \%$ advantage for the GOP from four years earlier (Mellow, 2018; Sabato, 2017).

While the gender gap has been a feature of American politics since 1980, there was reason to expect that the release of a recording of Mr. Trump bragging about his ability to get away with assaulting women and the frequent instances of using demeaning language towards women and many others would make the gap more pronounced in 2016. Instead, the gap remained statistically unchanged from 2012. The gaps between white women and white men also remained unchanged. A further look reveals signifi-
cant differences between men and women, however, and among women. Sec. Clinton actually lost ground among African American men and Latino women. She also lost ground among unmarried men, while gaining among married women. She also won a slim majority ( $51 \%$ ) of college-educated white women. But she was supported by only $34 \%$ of white women without a college degree (Mellow, 2018; Sabato, 2017).

This review of exit poll data provides only a rudimentary understanding of why Donald Trump was able to win the presidency despite the weakness of his candidacy and also why Sec. Clinton was unable to capitalize on his weaknesses. The first article by Michael Acampora, "Authoritarianism and Populism in American Politics," goes beyond crude demographics as a way to explain candidate support. Using a political psychology perspective in analyzing the electorate, he finds that Mr. Trump was able to broaden the GOP's appeal to right-wing populists, who he categorizes as "outsiders" and are socially conservative but financially insecure and desire a strong leader. In addition, he maintained the traditional Republican base of upscale conservatives, which he categorizes as "traditionalists," even though they supported other candidates for the nomination. The two groups had much more in common, mainly a high disapproval of the current President and his more internationalist worldview. This was not the case for Democrats, where he finds that the two major groups were deeply divided over the highly salient issues in 2016 of trade and globalization.

Katie Gilroy's, "When P*Ssy Grabs Back: An Examination of the Gender Gap in the 2016 Presidential Election," analyzes data from the last three American National Election Studies to understand how gender and the other demographic variables discussed above work in combination with each other and how the effects of these gender interactions have changed since the last two elections. Her more in-depth and sophisticated analysis largely confirm the conclusions drawn from the exit polls. But she also finds that a gender gap among Hispanics for the first time and that Hispanic female Democrats were especially loyal to their party. Lastly, she finds in pre-election polling that the gender gap was especially volatile over the course of the campaign and in response to campaign events. This would suggest that many independent and Republican women were unwilling to express support for Mr. Trump at times but in the end, they voted in the way that best aligned with their worldview.

The third paper in this special issue, "Agenda Setting: The Barriers to Preventative Healthcare Issue Attention in the United States Congress," by Jennifer Corso, reminds us of how elections and who gets elected matter for public policy. The 2016 presidential candidates took very different positions on important and divisive issues such as immigration, trade, health care, abortion, and guns to name just a few. The first two years of the Trump Administration resulted in a number of policy reversals from the previous administration and the appointment of over 100 new federal judges and two Associate Justices to the Supreme Court. But Corso's detailed and novel analysis shows that social context and public demand also matter by motivating legislators to be proactive in terms of problem-solving. She finds that the members of Congress who pay the most attention to preventive health care policy alternatives are those elected by constituencies with the most fitness centers and greater access to fresh produce.

This special issue closes with Ryan Amelio's "Measuring the Effect of Demographic, Economic, and Political Factors on Voter Turnout in the 2016 Presidential Election." While his research largely confirms past research on the relationship between demographic variables and voter turnout, Amelio also finds that women were more motivated to vote in 2016 than in the past. Another important contribution is that he finds that a high number of ballot initiatives up for a vote on Election Day decreases the probability of voting once the number exceeds eight. Together, this provides us with a better understanding of the 2016 elections and its consequences as well as insights into future elections. They also demonstrate why it is important for today's voters to be informed and participate in the electoral process. In a highly divided electorate, every vote counts and collectively matters immensely on the how this nation is governed.

## References

Campbell, J. (2016). Forecasting the 2016 American national elections: Introduction. PS: Political Science \& Politics, 49(4), 649-654.Costa, R. (2017). Donald Trump and a GOP primary race like no other. In L.J. Sabato, K. Kondik, \& G. Skelley (Eds.), Trumped: The 2016 election that broke all the rules. Lanham, MD: Rowman \& Littlefield Press.

Currinder, M. (2018). Campaign finance: Where big money mattered and where it didn't. In M. Nelson (Ed.), The election of 2016. Thousand Oaks, CA: Sage CQ Press.

Diamond, J. (2016, February 3). Trump says skipping debate might have cost him in Iowa. CNN.com. Retrieved from https://www.cnn.com/2016/02/02/poli-tics/donald-trump-iowa-new-hampshire/ index.html.

Edwards-Levy, A, Jackson, N, \& Velencia, J. (2017). Polling in the 2016 election. In L.J. Sabato, K. Kondik, \& G. Skelley (Eds.), Trumped: The 2016 election that broke all the rules. Lanham, MD: Rowman \& Littlefield Press.

Graham, D.A. (2016, June 16). What the press got right about Trump's candidacy. The Atlantic. Retrieved from https:// www.theatlantic.com.

Hershey, M.R. (2018). The media: Covering Donald Trump. In M. Nelson (Ed.), The election of 2016. Thousand Oaks, CA: Sage CQ Press.

Hetherington, M.J. (2018). The election: The allure of the Outsider. In M. Nelson (Ed.), The election of 2016. Thousand Oaks, CA: Sage CQ Press.

Holyk, G., \& Langer, G. (2016, August 31). Poll: Clinton unpopularity at new high, on par with Trump. ABCnews.com. Retrieved from https://abcnews.go.com.

Mayer, W.G. (2018). The nominations: The road to a much-disliked general election. In M. Nelson (Ed.), The election of 2016. Thousand Oaks, CA: Sage CQ Press.

Mellow, N.E. (2018). Voting behavior: Continuity and confusion in the electorate. In M. Nelson (Ed.), The election of 2016. Thousand Oaks, CA: Sage CQ Press.

Nelson, M. (2018). The setting: Broadening the presidential talent pool-for better and worse. In M. Nelson (Ed.), The election of 2016. Thousand Oaks, CA: Sage CQ Press.

Ross, C. (2015, June 3). Donald Trump donated heavily to Democrats, especially during election which put Reid and Pelosi In power. Daily Caller. Retrieved from https://dailycaller.com.

Sabato, L.J. (2017). The 2016 election that broke all, or at least most, of the rules. In L.J. Sabato, K. Kondik, \& G. Skelley (Eds.), Trumped: The 2016 election that broke all the rules. Lanham, MD: Rowman \& Littlefield Press.

Sargent, G. (2017). "Feel the Bern:" Hillary's agonizing loss and the future of the Democratic Party. In L.J. Sabato, K. Kondik, \& G. Skelley (Eds.), Trumped: The 2016 election that broke all the rules. Lanham, MD: Rowman \& Littlefield Press.

Schmidt, K., \& Andrews, W. (2016, December 19). "A historic number of electors defected, and most were supposed to vote for Clinton. The New York Times. Retrieved from https://www.nytimes. com.

Sides, J., Tesler, M., and Vavreck, L. (2018). Identity crisis: The 2016 presidential campaign and the battle for the meaning of America. Princeton, NJ: Princeton University Press.

# Authoritarianism and Populism in American Politics 

By Michael Acampora*


#### Abstract

Previous research has demonstrated authoritarianism as a significant factor influencing polarization on a wide range of political issues. However, it fails to consider that adding a populism dimension to create a double variable offers greater insight and explanatory value. This article proposes that authoritarianism and populism are distinct political predispositions as applied to recent U.S. political and social history and that people can be segmented into five groups based on their level of both authoritarianism and populism. This hypothesis was tested by analyzing a range of variables from the 2016 American National Election Study, a national sample of 4,271 respondents interviewed in person and on the web in 2016. Using an established measure of authoritarianism and a newly created measure of populism, five distinct groups were created: Post-Modernists, Elites, Outsiders, Traditionalists, and Ambivalents. Based on analysis of demographic data and issue positions, these five groups are informative in understanding the current political climate across many issues and is particularly helpful in understanding support for 2016 presidential primary candidates. The results confirm the research hypothesis that populism and authoritarianism are conceptually and empirically distinct and that adding a populism dimension to authoritarianism is a superior measure with greater explanatory value.


Keywords: Authoritarianism, Populism, Politics, 2016 Election, Donald Trump, Hillary Clinton, Bernie Sanders.

## I. Introduction

The election of Donald J. Trump as President of the United States shocked the world (Gruber 2016; Martenelli 2016). A real estate developer and reality-television star with no political or military experience, Mr. Trump ran a campaign characterized by many commentators as divisive and gaffe-prone. Nearly every political professional, journalist, and forecaster thought it was nearly impossible he would find success with the American electorate (Gruber 2016; Martenelli 2016; Silver 2016). Yet every step of the way, he was able to appeal to an ever-larger segment of the population that appeared tired and even contemptuous of the "political establishment."

What explains Mr. Trump's longshot victory? Although political fundamentals point to the innate difficulty of the same party winning three presidential elections in a row and Hillary Clinton's unpopularity (Cook 2014; Gallup 2016), Trump's victory

[^1]seems to indicate something different. Mr. Trump focused on a set of issues that connected with the electorate's social and economic anxieties-particularly among the white working class-placing blame on the political establishment and the so-called "global elites."

Consider the parallel rise of Bernie Sanders on the Left and Donald Trump on the Right. Sanders, an Independent Senator from Vermont and self-professed socialist, called for a political revolution-decrying income inequality, corporate profiteering, student debt, and the loss of jobs to trade-and received a respectable $43 \%$ of Democratic primary votes (Real Clear Politics 2016). On the surface, the only substantive policy issue shared by Sanders and Trump was trade, while holding radically different views on immigration, taxes, regulations, climate change, and foreign policy (White, McCaskill, \& Breland 2016). When comparing Sanders and Trump as "populists," pundits appear to disregard ideology and instead point to the anti-elite and anti-establishment messaging. While offering different solutions, both campaigns were devoted to telling the public that they were being taken advantage of by those at the top of society.

The 2016 election is not the first time populism has been at the forefront of American politics. George Wallace, Huey Long, William Jennings Bryan, and Andrew Jackson have all been described as some variation of populist leaders (Lehmann 2015). The Tea Party Movement that started within the Republican Party in 2009 is a more recent example of what many consider a populist uprising (Mead 2011; Williamson, Skocpol, Coggin 2011). Examining the historical rise of populism in the United States can help explain what is occurring today. The inherent confusion is that all of these movements and politicians represent radically different views.

While both Sanders and Trump are frequently referred to as populists, Trump is alone in his characterization as an authoritarian candidate-citing his strong-man posturing, demagoguery, and nationalist rhetoric (Inglehart and Norris 2016; Mather and Jefferson 2016; Norris 2016). Authoritarians are typically described as desiring greater order to combat a perceived threat, they are willing to exchange less freedom for more safety (Taub 2016). Trump started his campaign deriding illegal immigrants from Mexico as rapists and murderers and after terrorist attacks in Europe, he quickly called for a halt on Muslims entering the United States. He has described himself as the law and order candidate who can combat what he describes as out-of-control crime. If Sanders and Trump are both populists running against the elite, is authoritarianism what distinguishes their divergence on a host of issues?

The purpose of this article is to identify both the distinguishing characteristics of Americans with authoritarian and populist predispositions along with the creation of a unique double variable authoritarian-populist framework. In order to test the hypothesis, that crossing the distinct variables of authoritarianism and populism gives a more meaningful and predictive set of categories about the American voting public than either alone, five distinct groups of people based on their level of authoritarianism and populism were created. Using the 2016 American National Election Survey, two sets
of questions form separate authoritarian and populist scales. The five groups created from these scales are tested by building demographic profiles for each group along with regression models to distinguish support among eight key issues.

## II. Previous Research

Before examining support for political candidates like Donald Trump and Bernie Sanders, it is important to understand how people develop their political opinions in the first place. Political opinions must have some benefit to the people who hold them (Erikson and Tedin 2015). This benefit can come in the form of numerous positive psychological functions for which holding a given set of political opinions serves (Smith, Bruner, and White 1956). Conventional wisdom assigns personal benefit largely to economic self-interest. However, self-interest is far from the dominant factor that shapes political opinions (Erikson and Tedin 2015). Instead, opinions are often shaped by broader political predispositions (Alvarez and Brehm 2002; Feldman 1988; Goren 2004; Haidt 2012). Political predispositions can take the form of party identification, or more relevant to this research-authoritarianism and populism. These abstract principles are important because they cause people to have political opinions even when they have no direct stake in the particular issue (Bawn 1999; Stenner 2005; Gerber, Herbert et al 2011). With the understanding that political predispositions originate with early socialization and with the unique aspects of personalities along with evidence that these predispositions persist, there is clear value of exploring two of these predis-positions-authoritarianism and populism-in depth.

## Authoritarianism

Authoritarianism, at its most basic level is a desire for order-demonstrating a greater willingness to sacrifice freedoms and civil liberties in exchange for enforcing social conformity and security (Feldman and Stenner 1997; Feldman 2003; Hetherington and Weiler 2009; Stenner 2005). The problem for political scientists was trying to figure out who these authoritarians are. In 1990, Stanley Feldman developed what has become the definitive measurement of authoritarianism. Feldman created four simple questions that ask about parenting, but are in fact designed to reveal how the respondent values hierarchy, order, and conformity (Feldman and Stenner 1997).

Since 1992, Feldman's four questions have been included in the National Election Study conducted each national election year. Hetherington and Weiler in Authoritarianism and Polarization in American Politics (2009) used Feldman's authoritarianism measurement strategy extensively to explain the increased polarization in American politics. They found that differences concerning many contemporary issues-race, gay marriage, illegal immigration, and the use of force to resolve security problems-are directly related to individuals' levels of authoritarianism. They trace the reinvention of the Republican Party in the 1960s as the party of law, order, and traditional values as
the result of authoritarians gravitating toward the GOP. As their concentration grew, authoritarians gained more influence in structuring Republican policy positions (Hetherington and Weiler 2009).

In The Authoritarian Dynamic (2005), Karen Stenner offered a similar exploration of authoritarianisms. Stenner found a subset of people who hold a latent authoritarian predisposition that is activated by the perception of physical threats, destabilizing social change and a general loss of confidence in political leaders.

Hetherington disagrees with Stenner that authoritarians are "activated," instead he argues preferences among those with high levels of perceived threat converge towards the authoritarian position (Hetherington and Weiler 2009; Hetherington and Suhay 2011; Stenner 2005). Rather than a latent predisposition being activated by greater perceived threat, Hetherington found that when non-authoritarians feel sufficiently scared, they start to behave like authoritarians (Hetherington 2011). An example of this is in the aftermath of the September $11^{\text {th }}$ terrorist attacks. The high level of perceived threat converged many non-authoritarians toward issue positions held by authoritarians, including high approval of President Bush and a preference for military strength over diplomacy (Hetherington 2009). An important distinction is made between physical threats and social threats-with only physical threats leading non-authoritarians to behave like authoritarians (Hetherington and Suhay 2011).

In The Rise of American Authoritarianism (2016), Amanda Taub offers a comprehensive review of key ideas within authoritarianism. Additionally, she worked with polling firm Morning Consult to put together five sets of questions to demonstrate a link between authoritarianism and support for Donald Trump along with other ways authoritarianism was playing out in American life (Taub 2016). The survey was conducted during the presidential primaries in February 2016.

Taub found that 44 percent of white respondents nationwide scored as "high" or "very high" authoritarians, a figure in line with previous research. The survey also found that authoritarians skew Republican, with more than 65 percent of "very high" authoritarians identifying as GOP voters. People who scored as the most non-authoritarian were almost 75 percent Democrats (Taub 2016). This may serve as confirmation of the political polarization Hetherington and Weiler found in their 2009 examination of authoritarianism.

Taub's survey also found that authoritarianism was the best predictor of support for Donald Trump, even after controlling for education level and gender. Trump has 52 percent support among very high authoritarians, above the 42 percent support among self-identified Republicans (Taub 2016). However, other research suggested authoritarians are no more likely to support Trump than they are other Republican candidates such as Marco Rubio and Ted Cruz (Rahn 2016). Taub's survey also found that authoritarians tend to have the greatest fear of threats from abroad-particularly terrorism. Non-authoritarians were much less scared of these threats-with 73 percent of very high authoritarians believing that terrorists pose a very high risk to them, compared to only 45 percent of low-scoring authoritarians (Taub 2016).

Hetherington, using Taub's (2016) survey, found a group of non-authoritarians who were very afraid of foreign threats like Iran or ISIS. The greater the fear of these threats, the more likely these non-authoritarians were to support Trump (Taub 2016). This appears to support the theory developed by Hetherington and Suhay (2011) that non-authoritarians who are sufficiently scared of physical threats start to behave like authoritarians. Taub points out that high media coverage of foreign threats-both real and perceived-along with certain demographic and economic pressures can trigger a groundswell of support for authoritarianism.

Taub goes on to surmise that what is commonly identified as right-wing popu-lism-the rise of Donald Trump-aligns almost perfectly with authoritarianism (Taub 2016). If this alignment between right-wing populism and authoritarianism is true, Taub's data on authoritarianism reveals some notable exceptions for what many consider populist policy preferences. For example, there was no distinction across the degrees of authoritarianism for support for tax cuts or trade agreements, two policy preferences believed to be highly correlated with Populism (Taub 2016).

## PopULISM

The term populism has often been used any time a candidate or movement surprises the political establishment (Lehmann, 2015). At its most basic level, political pundits agree that populism appeals directly to the "ordinary people." When referring to politicians, populism is said to be a style of rhetoric more than an ideology, "it speaks of a battle of good against evil, demanding simple answers to difficult problems" (Packer 2015). There is consensus that populist rhetoric champions people against the political establishment and economic elites (Mueller 2016; Norris 2016; Judis 2016).

Most scholars leave the definition of populism at this broad, anti-establishment level (Mueller 2016; Packer 2015; Judis 2016). However, others argue for a more detailed definition (Mueller 2016; Packer 2015). In this view, a populist's view of the forces oppressing the ordinary people includes a wide range of possibilities, "a particular group of malefactors (Mexicans, billionaires, Jews, politicians)" along with a belief that only "authentic" people are willing to talk about it (Packer 2015). The main controversy within the literature is whether populism goes beyond an opposition to the political establishment to include opposition to these different minority groups.

It is also important to distinguish a populist leader or candidate from an ordinary citizen who may be classified as a populist or who supports a populist candidate. In a more refined definition of a populist leader, in addition to being anti-elitist, populist leaders are said to be anti-pluralists, claiming "that they, and they alone, represent the people" and frame political opponents as part of the corrupt elites (Mueller 2016).

Mueller goes further and says that populism requires a "pars pro toto argument," a claim to exclusive moral representation of the people as a whole. Opposition is viewed as illegitimate, in conflict with the populists' view that they have an unambiguous mandate to represent the singular will of the people (Mueller 2016). In order for this to
be true, populists must claim that "only some of the people are really the people," and thus they represent the so-called "real America" (Mueller 2016).

This definition means that some commonly held movements and politicians do not qualify as populist. Donald Trump perfectly exemplified this pars pro to argument when he stated, "the only important thing is the unification of the people-because the other people don't mean anything" (Mueller 2016). However, those with similar policy ideas or anti-elite rhetoric who fail to make the moral claim to exclusive representation are not considered populists. According to Mueller (2016), this means that Bernie Sanders is not a populist, as he has never made any such moral claim. This claim goes against conventional wisdom and applies a rather narrow definition of populism.

To provide some historical context, the rise of populism appears to track the decline in power of political parties. According to Hans Kelsen (1955), democracy under modern conditions can only mean party democracy. Parties and the political establishment function as the key intermediaries between a pluralist society and the authoritative decisions required for a functioning political system (Mueller 2016).

These parties, which can easily be classified as political elites, used to solve problems and resolve conflicts behind closed doors. This informal system of political intermediation has slowly disappeared, replaced with more direct democracy, as a greater emphasis was placed on appealing directly to the people. Beginning in the nineteenth century, political reformers attacked these intermediaries as corrupt, undemocratic, and unnecessary, as a result, virtually every institution of government devised by the framers has turned toward popular control (White 2016). Examples include the US Senate, where direct elections have replaced selection by state legislatures; the Electoral College, where electors are now bound to cast votes based on the popular vote in their state; and primaries and caucuses replacing party bosses in determining political candidates. Even the selection of Supreme Court Justices appears to have moved in the direction of direct democracy after Republicans in the Senate refused to consider nominees until after the 2016 Presidential election, making the election in part a referendum on the Supreme Court. The increased popular control that led to the decline in political intermediation is paradoxically believed to have resulted in the widely-held view that government is ineffective and not working to solve the problems facing the country. The result is a vicious cycle of disempowering political professionals and then complaining that elected officials are ineffective (White 2016).

In addition to the democratization of the political system over the past two centuries, modern-day populism is frequently distinguished based on issues for which there has been a strong consensus among the elites-globalization, free trade, and immigration (Judis 2016). Globalization is frequently cited as a major contributor to the resurgence of populism around the western world. In effect, globalization has made the world more equal by closing the divide between rich and poor countries, but at the same time, has increased inequality within western countries. Income gains from 1998 to 2008 have greatly benefited the middle classes in emerging economies like China and India along with the richest $5 \%$ in western countries, while the majority of western
citizens have experienced declines in real income (Milanovic 2016). This results in an obvious conflict of interest between the "western elites" who greatly benefit from globalization and the rest of the population.

Economic discontent and inequality have been demonstrated as a political mobilizer and source of regime change. First, higher unemployment rates stimulate people to vote (Burden 2014). Second, higher levels of economic inequality reduce support for democracy amongst all social classes (Krieckhaus 2014). Perhaps this helps explain why insurgent populist candidates who appear to disregard some aspects of traditional democratic values and political movements like Brexit have found recent success with electorates in western democracies facing increasing inequality and economic discontent.

Globalization is not just an economic phenomenon, but also a cultural phenomenon in which a particular "cosmopolitan identity" is being actively promoted (Spruyt 2016). Spruyt et al. used survey data from Belgium to show that the losers of globalization, who feel deeply discontent, not only with politics but also with societal life, tend to have the strongest support for populist candidates. The cultural elements of globalization include a general open-mindedness and a fascination for new and different experiences (Spruyt 2016). Many working class and less educated people who have been left behind economically by globalization feel stigmatized as closed-minded for not sharing these cultural values (Spruyt 2016).

Like globalization, populism is often characterized as both an economic and cultural phenomenon (Spruyt 2016; Lehmann 2015; Judis 2016). The confluence between these two distinct characteristics of populism often clouds comparisons between populist movements. The populist movement of the late 19th century led by William Jennings Bryan was largely economic, seeking to unite the nation's producing classes (Lehmann 2015). On the other hand, southern segregationists like George Wallace engaged in "culture-first populism." Using this framework, Bernie Sanders is considered an economic populist whereas Donald Trump is a cultural populist. The "empty signifiers" of populism allow cultural populists to override the internal differences between the members of "the people" and unite different grievances (Spruyt 2016). In this view, populists can successfully unite people with different ideologies by focusing on opposition to the elites.

Mueller (2016) takes a different approach, distinguishing right-wing populism from left-wing populism. Whereas left-wing populists are only against the elites of society, right-wing populists are also against the very bottom of society. Right-wing populists portray both the top and bottom of society as parasitic to the working class. Right-wing populists often believe there is some form of collusion between the elites and the bottom of society, as in the right-wing view of the relationship between the coastal liberal elite and minorities in the United States.

While the research suggests some links between authoritarianism and populism, there are also notable distinctions. The "culture-first" and "right-wing" populism appear to have similarities to authoritarianism, particularly on attitudes toward minority
groups and cultural issues like abortion, gay marriage, and gender roles. This makes sense given the research indicating a strong relationship between authoritarianism and polarization on issues that can be described as going against traditional societal norms (Hetherington 2009). However, while Taub (2016) suggests right-wing populism may be the same as authoritarianism, her research demonstrates that authoritarianism and support for international trade agreements and tax cuts for the wealthy have no clear correlation. Research on populism points to anti-elite attitudes as a major force behind populism, pointing to a clear conflict in directly linking authoritarianism and populism. This paper proposes that crossing the variables of authoritarianism and populism gives a more meaningful and predictive set of categories about the American voting public than either alone. Additionally, this authoritarian-populist framework will illuminate voters' positions on a range of issues from gay rights and abortion to free trade and immigration in ways that more simplistic categorization does not.

## III. Methodology

To test my hypothesis, this paper analyzes data from the 2016 American National Election Study (ANES). The 2016 ANES is a national survey of 4,271 U.S. eligible voters conducted between September 2016 and January 2017. The study included both in person interviews along with an internet sample. Both groups were interviewed in two waves, both before and after the November 9th national election. Using the 2016 ANES this paper identifies two sets of questions that result in separate authoritarian and populist scales. The distinctions between the five groups ultimately created from these scales are tested by building demographic profiles for each group along with regression models to distinguish support among eight key issues.

## AUTHORITARIANISM

Authoritarianism, which defined at its most basic level is a desire for order, as noted above, has received a great deal of research into optimal measurement procedures. The Feldman scale (Feldman and Stenner 1997), a set of four questions that ask respondents to judge attractive attributes in children has been used in previous examinations of Authoritarianism, notably by Hetherington (2009, 2011), Stenner (2005), and Taub (2016). This measure of authoritarianism eliminates the problem other authoritarian scales have faced by having to ask questions that explicitly taps intolerance. Another popular measure of authoritarianism is the Right-Wing Authoritarianism (RWA) scale (Hetherington 2009). However, because it included question like "gays and lesbians are just as healthy and moral as anybody else," Feldman argued that the RWA scale fails to distinguish between social conservatism and authoritarianism and was of little value as an explanatory variable to explain things like intolerance toward specific out-groups if the questions themselves asked about those groups (Feldman 2003; Hetherington 2009).

The advantage of Feldman's set of questions is that people are only asked to consider questions about ideal attributes in children rather than specific ideological or policy positions. According to Martin (1964), exploring child-rearing attitudes is an appropriate measure of authoritarianism:

The subject of child-rearing techniques pinpoints a fundamental proposition in human relations: how should people (superordinate parents in this case) treat other people (subordinate children, in this case)? Should parent off-spring relations be based on mutual trust, genuine affection, and cooperation-democratic, in a word-or is the ideal relationship an "authoritarian" one, based upon power, fear, obedience to a power figure, and mutual distrust, or some compromise between these "polar" positions? (Martin 1964)

Hetherington also found the set of questions to be valid due to the high correlation to Feldman's (2003) Social Conformity-Autonomy Scale and the previously mentioned RWA scale. The four questions are introduced in the ANES as follows:

Although there are a number of qualities that people feel that children should have, every person thinks that some are more important than others. I am going to read you pairs of desirable qualities. Followed by four pairs of questions:

1. "Independence" or "Respect for elders"
2. "Curiosity" or "Good manners"
3. "Obedience" or "Self-reliance"
4. "Being considerate" or "Well behaved"
"Respect for elders," "good manners," "obedience," and "well behaved" are the authoritarian response.

This project utilizes the Feldman scale to measure authoritarianism. The four Feldman questions were entered into a rotated factor analysis, which combined the responses to the four questions into a single score for each individual. In person interviews include the voluntary response category of "both" and "neither." Since very few cases fell in these two responses and online interviews did not allow for them, they were excluded for the purposes of creating the authoritarian scale in this paper.

In the below varimax rotated component matrix from the 2016 ANES (Table 1), all four of Feldman's questions were found to be statistically significant, producing correlations above 0.5 (Field 2005). For this reason, all four questions were utilized in the creation of the authoritarian factor.

Table 1
Authoritarian Scale

| Component Matrix |  |  |
| :--- | :--- | :---: |
| Please tell me which one you think is more important for a child to have: |  |  |
| Curiosity or good manners | 0.768 |  |
| Obedience or self-reliance | 0.727 |  |
| Independence or respect for elders | 0.692 |  |
| Being considerate or well-behaved | 0.590 |  |
| Extraction Method: Principal Component Analysis. |  |  |

## Populism

The literature on populism is less conclusive on how best to measure populism. While there is contention on many aspects of populism, there is consensus that populism includes heavy amounts of anti-establishment and anti-elite beliefs and rhetoric. There is no established populism factor, so this paper created one based on the research covered earlier.

The following seven questions from the 2016 ANES fit the description of populists, namely an aversion and disdain for the political establishment. The cultural aspects frequently described as an attribute of populism, specifically questions that involve moral tolerance towards minorities was intentionally excluded from this list for the same reason Feldman (2003) cited as a weakness on RWA. Additionally, the attribution of these characteristics to populism is a main contention of this paper, which seeks to distinguish populism from authoritarianism. The following questions and statements address anti-establishment and anti-elite attitudes, but are believed not to measure authoritarian predispositions:

1. Most politicians only care about interests of rich and powerful.
2. Electoral integrity: do the rich buy elections?
3. Electoral integrity: are votes counted fairly?
4. Public officials don't care what people think.
5. Most politicians do not care about the people.
6. Most politicians are trustworthy.
7. People, not politicians should make most important policy decisions.

These seven questions were entered into the rotated factor analysis as used for the authoritarian scale. Five questions, with correlations above 0.5 were included in the final populism scale (Table 2).

## Table 2

Populist Scale

| Component Matrix |  |
| :--- | :---: |
| Most politicians do not care about the people | 0.781 |
| Most politicians only care about interests of rich <br> and powerful | 0.774 |
| Public officials don't care what people think | 0.665 |
| Most politicians are trustworthy | -0.582 |
| Electoral integrity: do the rich buy elections | 0.559 |
| Extraction Method: Principal Component Analysis. |  |

The authoritarian and populist factor scores were each segmented into one-third percentiles based on their factor scores. Combined, the two percentiles create a three by three matrix (Table 3). We can tell that these two scores are not measuring the same thing as each of the nine tiles have a similar number of cases. Additionally, the Pearson correlation is a low $(-0.063)$.

## Table 3

Populist Percentile * Authoritarian Percentile Cross-tabulation

|  |  |  | Authoritarian Percentile |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 (Low) | 2 | 3 (High) |
|  |  | Count | 362 | 341 | 425 |
|  | 1 (High) | \% | 30.9\% | 33.6\% | 34.3\% |
|  |  | Count | 389 | 343 | 417 |
|  | 2 | \% | 33.2\% | 33.8\% | 33.7\% |
|  |  | Count | 419 | 330 | 397 |
|  | 3 (Low) | \% | 35.8\% | 32.5\% | 32.0\% |

Each of the corner tiles in the matrix are set as four unique groups which will be examined in this paper. The upper right tile $(1,3)$ is the "High Authoritarian High Populist" group. The lower right tile $(3,3)$ is the "High Authoritarian Low Populist" group. The upper left tile $(1,1)$ is the "Low Authoritarian Low Populist" group. The lower left tile $(1,3)$ is the "Low Authoritarian Low Populist" group. The remaining five tiles were grouped into a single "Ambivalents" group. Utilizing a three by three matrix and examining the outermost tiles should produce more distinctive differences
between these two groups. A preliminary examination of the four groups using a two by two matrix produced similar results, just less distinctive.

## Demographic Profiles

The first demographic measure examined was self-identified race (Table 4). Nonwhite increases as you move from low to high levels of both populism and authoritarianism. While this is noteworthy, it is also likely to alter the ultimate results of this study as minority groups have been demonstrated to identify and vote overwhelmingly for Democratic groups. Previous research has demonstrated that African Americans hold more authoritarian parenting positions, but that it does not necessarily influence other policy or ideological positions (Hetherington 2009). For this reason, all self-identified non-white cases are excluded from the groups for the purposes of producing demographic profiles and controlled for when policy issues are examined.

To understand the demographic profile of these four groups, this paper examined age, income, education, marital status, religion, political participation, and ideological self-placement. Table 4 summarizes the percentage of each group falling in the given demographic categories. Across the vast majority of these demographic categories, the four groups are demonstrated to be distinct from each other.

Table 4
Selected Demographics Authoritarian-Populist Scale

|  |  | 皆 | 皆 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Self-Identified Race |  |  |  |  |  |
| Non-White | 24.0\% | 17.6\% | 12.2\% | 8.8\% | 20.1\% |
| White | 74.4\% | 80.9\% | 87.0\% | 90.2\% | 79.0\% |
| Age Group |  |  |  |  |  |
| 18-34 | 19.0\% | 23.3\% | 32.3\% | 21.8\% | 24.8\% |
| 35-59 | 40.7\% | 36.9\% | 42.3\% | 43.0\% | 43.0\% |
| 60 or older | 40.3\% | 39.7\% | 25.5\% | 35.2\% | 32.2\% |
| Chi-Square $=30.16, p<.001$ |  |  |  |  |  |

Income

| Under $\$ 35,000$ | $42.7 \%$ | $30.0 \%$ | $26.9 \%$ | $18.1 \%$ | $27.7 \%$ |
| :---: | :---: | :--- | :--- | :--- | :--- |
| $\$ 35,00$ to $\$ 74,999$ | $31.9 \%$ | $32.5 \%$ | $27.3 \%$ | $25.3 \%$ | $32.4 \%$ |
| $\$ 75,000$ to 149,999 | $21.7 \%$ | $26.8 \%$ | $31.8 \%$ | $32.4 \%$ | $28.9 \%$ |
| $\$ 150,000$ or more | $3.7 \%$ | $10.7 \%$ | $14.0 \%$ | $24.2 \%$ | $11.0 \%$ |

Chi-Square $=3112.78, p<.001$
Highest Level of Education

| Some College and Less | $60.5 \%$ | $55.2 \%$ | $31.6 \%$ | $23.9 \%$ | $45.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Undergraduate Degree | $32.5 \%$ | $34.2 \%$ | $46.3 \%$ | $39.4 \%$ | $39.5 \%$ |
| Graduate Degree and Higher | $7.0 \%$ | $10.7 \%$ | $22.0 \%$ | $36.7 \%$ | $14.9 \%$ |
| Chi-Square $=312.78, p<.001$ |  |  |  |  |  |

## Marital Status

| Never married | $19.3 \%$ | $20.6 \%$ | $33.7 \%$ | $23.3 \%$ | $33.7 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

Chi-Square $=65.47, \mathrm{p}<.001$
Church Attendance
$\begin{array}{llllll}\text { Weekly } \text { or More } & 24.1 \% & 33.8 \% & 8.3 \% & 11.6 \% & 16.1 \%\end{array}$
Chi-Square $=169.43, \mathrm{p}<.001$
Religious Identification
Agnostic or Atheist
5.7\%
2.5\%
28.3\%
18.0\%
10.3\%

Chi-Square $=59.037$ for Agnostic, 87.96 for Atheist, $\mathrm{p}<.001$ for both
Does Christian Respondent Consider self born again?
Yes
46.5\%
52.1\%
13.9\%
17.0\%
30.7\%

Chi-Square $=238.51, p<.001$
Registered to Vote
$\begin{array}{llllll}\text { Yes } & 84.2 \% & 86.0 \% & 88.9 \% & 91.3 \% & 86.0 \%\end{array}$
Chi-Square $=10.48, p=.033$
Close to any Political Party
$\begin{array}{llllll}\text { Yes } & 48.7 \% & 59.8 \% & 54.3 \% & 67.2 \% & 54.3 \%\end{array}$
Chi-Square $=30.81, p<.001$
Voted in 2016 Presidential Primary
$\begin{array}{llllll}\text { Yes } & 38.0 \% & 45.8 \% & 52.4 \% & 50.5 \% & 43.7 \%\end{array}$
Chi-Square $=18.84, p=.001$

## A. Age

The High Authoritarian High Populist group is the oldest, while the Low Authoritarian High Populist group is the youngest. For the High Authoritarian High Populist group, $40.3 \%$ fall within the 60 or older category compared to only $25.5 \%$ for the Low Authoritarian High Populist group. Additionally, in the Low Authoritarian High Populist group $32.3 \%$ are in the 18 to 34 category, compared to only $19 \%$ in the High Authoritarian High Populist group. Interestingly, the two Low Populist groups are very similar in their age profile, with the Low Authoritarian Low Populist group having slightly more in the middle-aged category.

## B. Income

For income, it appears that moving towards low authoritarianism and low populism corresponds to higher incomes. The differences here are stark, with only $3.7 \%$ of those in the High Authoritarian High Populist group falling in the $\$ 150,000$ or more income category, compared to a remarkable $24.2 \%$ of those in the Low Authoritarian Low Populist group. The two middle groups, High Authoritarian Low Populist and Low Authoritarian High Populist are closer to each other, with the Low Authoritarian High Populist group showing slightly higher incomes.

## C. Education

Education, unsurprisingly follows in the same direction as income. With the High Authoritarian High Populist group reporting the lowest education attainment and the Low Authoritarian Low Populist group the highest. Again, the differences are large, with only $7 \%$ of the High Authoritarian High Populist group attaining graduate degrees compared to $36.7 \%$ in the Low Authoritarian Low Populist group. The middle groups are again closer to each other, with the Low Authoritarian High Populist group having slightly higher levels of educational attainment.

## D. Marital Status

The High Authoritarian High Populist group contains the smallest number of people who have never married, whereas the Low Authoritarian High Populist group has the most. This is most likely a result of the divergent age profiles.

## E. Religion

The High Authoritarian Low Populist group is the most religious, with the fewest number of atheists or agnostics, the highest weekly church attendance rate and they are the most likely to consider themselves "born again." Authoritarianism appears to have
the higher correlation with religious devotion as the High Authoritarian High Populist group is a close second. The Low Authoritarian High Populist group is the least religious. The difference is religious devotion is again quite stark, with $28.3 \%$ of the Low Authoritarian High Populist group identifying as the agnostic or atheist compared to just 2.5\% for the High Authoritarian Low Populist group.

## F. Political Participation

All four groups report similar levels of voter registration, with slightly higher levels as you move toward low authoritarianism and low populism. However, connection to a political party and participation in the 2016 primaries is more distinct. The High Authoritarian High Populist group is least likely to identify with any political party, at 48.7\% while the Low Authoritarian Low Populist group is most likely at $67.2 \%$. The middle groups are again closer to each other, with the Low Authoritarian High Populist group having slightly higher levels of identification with a political party. Participation in the 2016 primaries follows this same pattern, with only $38 \%$ of those in the High Authoritarian High Populist group participating compared to $52.4 \%$ in the Low Authoritarian High Populist group.

## G. Political Ideology

As displayed in Figure 1, ideological self-placement strongly correlates with authoritarianism. The Low Authoritarian High Populist group is the most liberal, with nearly $60 \%$ identifying as extremely to slightly liberal. The Low Authoritarian Low Populist group is not far behind, with nearly $50 \%$ identifying as liberal. The High Authoritarian Low Populist group is the most conservative, with nearly $67 \%$ identifying as extremely to slightly conservative. The High Authoritarian High Populist group is slightly less conservative overall, with $53 \%$ identifying as conservative, however, this group has the highest number of people self-identifying as extremely conservative, at $12 \%$. What is particularly interesting is how few in the high authoritarian groups identify as liberal. In the High Authoritarian Low Populist group, not a single person identified as extremely liberal. The bottom line here is that as you move towards high authoritarian conservatism increases, whereas as you move towards high populism, liberalism increase, although to a lesser extent.

## Figure 1

Liberal-Conservative Self-Placement


Table 5 was created to summarize the five groups' demographic profiles. Based on these profiles, each group was assigned a substantive designator that captures their distinctive demographic profiles.

Table 5
Demographic Profile

| Low Authoritarian <br> High Populist - "Post-Modernists" <br> - Most Liberal <br> - Young <br> - High Income <br> - High Level of Education <br> - Most Likely to be unmarried <br> - Least Religious <br> - High levels registered to vote <br> - Less likely to identify with a party <br> - Most likely to participate in 2016 Presidential Primaries | High Authoritarian <br> High Populist - "Outsiders" <br> - Conservative <br> - Old <br> - Lowest Income <br> - Lowest Level of Education <br> - Average likelihood to be unmarried <br> - Highly Religious <br> - Least likely to be registered to vote <br> - Least likely to identify with a party <br> - Least likely to participate in 2016 Presidential Primaries |
| :---: | :---: |
| Low Authoritarian <br> Low Populist - "Elites" <br> - Liberal <br> - Middle Aged <br> - Highest Income <br> - Highest Level of Education <br> - Average likelihood to be unmarried <br> - Less Religious <br> - Most likely to be registered to vote <br> - Most likely to identify with a party <br> - More likely to participate in 2016 Presidential Primaries | High Authoritarian <br> Low Populist - "Traditionalists" <br> - Most Conservative <br> - Middle Aged to Old <br> - Middle Income <br> - Low Level of Education <br> - Least likely to be unmarried <br> - Most Religious <br> - Average likelihood to be registered <br> - Average likelihood to identify with a party <br> - Less likely to participate in 2016 Presidential Primaries |
| "Ambivalents" <br> - Moderate to Conservative <br> - Middle Aged <br> - Average Income <br> - Average Education <br> - Average Religious participation <br> - Average level of party identification <br> - Average political activity |  |

The "Post-Modernists" are young, very liberal, highly educated, not very religious and politically active but less likely to identify with a political party. The "Elites" are middle aged, liberal, very highly educated with very high incomes, they are less religious, politically active, and most likely to identify with a political party. "Traditionalists" are middle aged to old, they are the most conservative group, tend to be middle-income with relatively low levels of educational attainment, they are also very religious and about average in political participation. The "Outsiders" tend to be older, conservative, they have the lowest educational attainment and lowest income, are highly religious, and least likely to be politically active or identify with a political party.

The fifth group, comprised of people who do not fall in the top or bottom third of either the authoritarian and populist factors are nearly indistinguishable from the aggregate demographics and ideology-falling near the average on every measure. For this reason, this group is referred to as the "Ambivalents."

A test of validity of this categorization is whom these groups supported in the 2016 Presidential primaries. As mentioned earlier, the 2016 election cycle saw the rise of unusual candidates on both sides of the political spectrum. On the left was Bernie Sanders, a self-professed socialist who ran against the political establishment-with many proclaiming him a populist candidate. On the right was Donald Trump, a billionaire political neophyte whose aggressive anti-establishment rhetoric had many calling him both populist and to a lesser extent an authoritarian candidate. Based on this we would expect the High Authoritarian High Populist group, the "Outsiders" to support Donald Trump; the High Authoritarian Low Populist group of "Traditionalists" to support Republicans other than Donald Trump; the Low Authoritarian High Populist "Post-Modernists" to support Bernie Sanders; and the Low Authoritarian Low Populist "Elites" to support Hillary Clinton.

Table 6
2016 Presidential Primary Support

|  |  |  |  | $\begin{aligned} & \text { 耧 } \\ & \frac{0}{50} \\ & 0 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | High Authoritarian High Populist | High <br> Authoritarian Low Populist | Low Authoritarian High Populist | Low <br> Authoritarian Low Populist | Moderates |
| Hillary Clinton | 45.5\% | 25.5\% | 13.0\% | 16.0\% | 22.0\% |
| Bernie Sanders | 21.2\% | 44.8\% | 8.2\% | 13.4\% | 18.5\% |
| Another <br> Democrat | 0.0\% | 0.0\% | 0.0\% | 0.8\% | 1.4\% |
| Donald Trump | 9.0\% | 17.6\% | 37.0\% | 42.9\% | 29.8\% |
| Another Republican | 22.8\% | 11.5\% | 41.1\% | 26.1\% | 26.8\% |
| Other | 1.6\% | 0.6\% | 0.7\% | 0.8\% | 1.4\% |

As displayed in Table 6, primary support by each group corresponds to these expectations. In each of the four groups, the plurality of votes went to the "predicted candidate." It is noteworthy that no candidate received majority support from any of the four groups, implying that there is more to candidate preference than is covered in this authoritarian and populist framework. However, the divergence in candidate support in each group is still quite clear and does validate this framework.

The relationship between the primary candidates and the four groups also provides some confirmation of the popular notion of the types of people who supported each candidate. We see that among the two low authoritarian groups, populism clearly distinguished support for Bernie Sanders. The high authoritarian groups are more closely aligned in their support for Donald Trump, suggesting support for Donald Trump is more closely related to authoritarianism than populism. However, there is evidence that higher levels of populism do correspond to greater support for Donald Trump. This is evident within the low authoritarian group, where support for Donald Trump increases from $9 \%$ to $17.6 \%$ as one moves from low to high populist. This is particularly interesting given that the Low Authoritarian High Populist group or "Post-Modernists" self-identified as the most liberal of the four groups, suggesting Donald Trump's antiestablishment (populist) rhetoric was somewhat appealing to them.

Perhaps the most interesting data point from Table 6 is that support for the category "Another Republican" was remarkably close for the two polar opposite groups, with $26.1 \%$ of Outsiders supporting these Republicans while nearly $23 \%$ of Elites supported the same group of Republicans. At the same time, these two groups were the furthest apart in their support for Donald Trump ( $42.9 \%$ vs $9 \%$ ). This highlights the dissatisfaction Outsiders felt towards their own Republican establishment, helping to explain the surprising level of support Donald Trump received on his path to the Presidency.

## IV. Issues

In order to evaluate if the five distinct groups created by the authoritarian-populist framework can be distinguished on a range of political issues, a linear regression model that controls for a number of potentially explanatory variables is utilized. The issues examined in this section are among the common issues that have been used when describing authoritarianism and populism (Hetherington and Weiler 2009; Hochscild 2016; Judis 2016). The following are eight issues, categorized into three distinct groups:

## Social Issues

1. Gay Rights
2. Abortion
3. Women's Rights

## Security/Civil Liberty Issues

4. Need for a Strong Leader
5. Torture

## Global/Financial Issues

6. Immigration
7. Trade
8. Financial Insecurity

## V. Data and Methodology

The data for this section utilizes the same 2016 American National Election Study (ANES) noted earlier. The regression results indicate the effect of moving from the Ambivalents, a group closest to the average of the American voting public, to one of the four distinct groups, after controlling for the potentially explanatory variables. Each group of issues have slightly different control variables, which are based on an attempt to maximize comparability to Hetherington and Weiler (2009). The full regression model for each issue is displayed in Table 7a and 7b.

## Social Issues

Support for gay rights has traditionally been a highly polarized issue among the American electorate. Hetherington (2009) provided an extensive examination of support for Gay rights, finding that the relationship to authoritarianism holds up after controlling for a wide range of other potential explanatory factors. In fact, he finds the effect of authoritarianism on support for gay rights is large, consistently stronger than partisanship and ideological self-identification. However, feeling threat from "newer lifestyles" and moral traditionalism were found to usually display even stronger relationships (Hetherington 2009).

In an attempt to distinguish support for gay rights among the five authoritarianpopulist groups, this section attempts to replicate Hetherington's model.

Hetherington used four variables from the 2004 ANES to examine support for Gay rights (Hetherington 2009).

1. Gay Adoption
2. Gays in the Military
3. Gay Employment Protections
4. Gay Marriage

All of these variables, with the exception Gays in the Military, were available in the 2016 ANES. Additionally, two related variables were added:

1. Services to Gay Couples
2. Transgender Bathroom Policy

In order to form more rigorous test of the relationship between authoritarianism and gay rights issues, Hetherington created a regression model. The model, which is replicated here, takes into account a range of social characteristics (race, age, education, income, and gender). Hetherington (2009) theorized that African Americans, older people, the less well educated, those with lower incomes, and men are less likely to be supportive of gay rights. Controls for church attendance and denomination are added, on the theory that evangelicals and Catholics will be less supportive of gay rights. In addition to party identification and ideological self-placement, a measure of moral traditionalism was added to account for that particular part of conservatism. The
final control in the model is a measure of perceived threat, specifically the response to the statement "newer lifestyles are contributing to the breakdown of our society" (Hetherington and Weiler 2009).

Hetherington's model is segmented by the variables: Gay Adoption, Gays in the Military, Gay Employment Protections, and Gay Marriage, finding a statistically significant negative relationship between authoritarianism and support for all gay rights issues. Since the ANES for 2016 does not cover the same exact group of gay rights issues, a single factor encompassing the five issues noted above was utilized to make comparisons easier.

Abortion is another polarizing issue that is typically explained largely along ideological lines. One would expect the typical liberal to be much more supportive of a woman's right to choose compared to the average conservative. Additionally, abortion is believed to be highly influenced by religious affiliation, with evangelical Christians and Catholics more likely to be opposed to abortion. Again, a more rigorous test of the relationship between the authoritarian-populist groups and support for abortion is needed. Abortion is a similar issue as gay rights and for this reason, Hetherington's regression model is appropriate. However, the control for perceived threat from new lifestyles is not relevant in this case, as unlike gay marriage, abortion is not viewed as a lifestyle and those in opposition to abortion are most likely not fearful that abortion may be imposed on them. Particularly important controls include race, moral traditionalism, party identification, ideological self-placement, age, and the measures of religion. Additionally, no factor was created because abortion can be fully represented by a single question on the 2016 ANES.

Women's rights is the idea that women should have equal rights with men-it has historically been shaped by issues like property rights, voting rights, reproductive rights, and more recently the right to work for equal pay. Based on Hetherington's (2009) description of authoritarians as being averse to change from established norms, we would expect authoritarians to be less supportive of women's rights. It is not clear how support for women's rights would be shaped by populism, so the assumption here is that authoritarianism is the main point of distinction. The same control variables for abortion were utilized.

However, like Gay rights, a factor scale had to be created in order to capture responses from multiple question. To measure support for women's rights, four questions from the 2016 ANES were utilized:

1. How important is it that more women get elected?
2. Is it better if the man works and the woman takes care of home?
3. Do women demanding equality seek special favors?
4. Do women complaining about discrimination cause more problems?

## Security/Civil Liberty Issues

Hetherington found that support for a wide range of civil liberties related issues were structured by authoritarianism. The two factors here-need for a strong leaders and support for torture-are expected to be structured by authoritarianism, with
little impact from populism. The controls in the model for Security/Civil Liberties is an attempt to replicate Hetherington's (2009) models on civil liberties-controlling for race, party identification, ideological self-placement, income and education. Additionally, Hetherington found that perceived threat of terrorism had a large impact on converging all views toward the authoritarian one. This was particularly true in the aftermath of the $9 / 11$ terrorist attacks. This perceived threat may also be important in explaining the support for a strong leader as well, as those with higher fears of terrorism may want a strong leader to offer protection and support for torture of terror suspects.

The question from the 2016 ANES: "The Country needs a strong leader to take us back to true path" is ideal because it does not impose an ideological framework of who that leader would be. A liberal responding to the question can assume that the "true path" is a more liberal one and a conservative can assume a more conservative one. Thus, the question gets to the heart of desiring a strong leader. The question of torture is simple, asking respondents "Do you favor or oppose torture for suspected terrorists?"

## Global/Financial Issues

Immigration, trade and financial insecurity were topics of frequent discussion during the 2016 Presidential election. Donald Trump ran a campaign that was vocally opposed to many forms of immigration, with signature message of building a wall along the southern border. Support for immigration is expected to be influenced primarily by authoritarianism given the cultural aspect and the understanding of the authoritarian polarization in preferences for out-groups that alter societal norms.

Among republicans, Donald Trump ran against free-trade agreements like NAFTA, promising to either re-negotiate better trade deals or pull out of them (OnTheIssues I). This was a big departure from recent Republican presidential candidates, who were generally pro-trade. Among democrats, Bernie Sanders campaign was also heavily focused on opposition to trade (OnTheIssues II). During his long tenure in the Senate, he never voted for a trade agreement and believed trade cost the United States millions of jobs. Previous research and popular convention has associated opposition to trade with populism.

Hochschild's (2016) assertion that the "the scene had been set for Trump's rise" was in part based on high levels of financial insecurity for the group of white working class voters she profiled. Similar arguments have been made for the strong support Bernie Sanders received in the democratic primary. Additionally, explanations of populism frequently includes economic discontent and financial insecurity. For this reason, two measures of financial security were analyzed:

1. How worried are you about your financial situation?
2. How much opportunity in America to get ahead?

The controls used for these three issues are replicated from the more simplified Hetherington model (2009) - controlling for race, party identification, ideological selfplacement, income and education.

## Model Results and Analysis

Table 7a and 7 b presents a summary of the statistically significant relationships for the eight issues after controlling for the symbolic attitudes and social characteristics detailed earlier.

## 1. Gay Rights

To start, we look at support for these five policies, distinguished by the five author-itarian-populist groups in Table 8. It appears that support for gay and transgender rights is primarily distinguished by authoritarianism. For the two high authoritarian groups, the support for each issue is typically significantly below the support from the two low authoritarian groups. Additionally, across the five issues, the two high authoritarian groups are within seven points of each other and the two low authoritarian groups are within three points. In comparison to Hetherington's data from 2004, support for gay rights has increased significantly. Overall support for adoption by gays has increased from $50 \%$ to $76 \%$, support for gay marriage has increased from $35 \%$ to $60 \%$ and support for job protection has increased from $75 \%$ to $83 \%$. What is particularly interesting is that increase in support has come almost exclusively from the high authoritarian groups. For example, support for adoption by gays was $28 \%$ for authoritarians in 2004, compared to $57 \%$ and $58 \%$ for the two high authoritarian groups in 2016.

## Table 7a

Full Regression Model

|  | 1. Gay Rights <br> Factor | 2. Support for <br> Abortion | 3. Women's Rights <br> Factor | 4. Need for a <br> Strong Leader |
| :--- | :---: | :---: | :---: | :---: |
|  | Param. Est <br> (Std. Err.) | Param. Est <br> (Std. Err.) | Param. Est <br> (Std. Err.) | Param. Est <br> (Std. Err.) |
|  | 1.073 | $2.695^{* * *}$ | -1.137 | $2.818^{* * *}$ |
| Intercept | $(0.693)$ | $(0.733)$ | $(0.662)$ | $(0.150)$ |
|  | Hoph Auth. - High | -0.346 | 0.117 |  |
| High Auth. - Low | $(0.461)$ | $(0.428)$ | $-1.448^{* * *}$ | $(0.383)$ |

Table 7b
Full Regression Model Part II

|  | 5. Favor Torture of Terror Suspects | 6. Favor Decreasing Immigration | 7. Trade is Good for the US | 8. Financial Insecurity Factor |
| :---: | :---: | :---: | :---: | :---: |
| Variable | Param. Est (Std. Err.) | Param. Est (Std. Err.) | Param. Est (Std. Err.) | Param. Est (Std. Err.) |
| Intercept | $\begin{gathered} 1.206 * * * \\ (0.097) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2.866 * * * \\ (0.124) \end{gathered}$ | $\begin{gathered} 2.179 * * * \\ (0.092) \\ \hline \end{gathered}$ | $\begin{gathered} 0.971 * * * \\ (0.115) \\ \hline \end{gathered}$ |
| High Auth. - High Pop. | $\begin{aligned} & \hline 0.111^{*} \\ & (0.048) \end{aligned}$ | $\begin{gathered} 0.329 * * * \\ (0.066) \end{gathered}$ | $\begin{gathered} -0.213^{* * *} \\ (0.049) \end{gathered}$ | $\begin{gathered} 0.327 * * * \\ (0.062) \end{gathered}$ |
| High Auth. - Low Pop. | $\begin{gathered} -0.027 \\ (0.048) \end{gathered}$ | $\begin{gathered} \hline 0.076 \\ (0.066) \end{gathered}$ | $\begin{gathered} \hline 0.049 \\ (0.049) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-0.218 * * * \\ (0.061) \end{gathered}$ |
| Low Auth. - High Pop. | $\begin{gathered} \hline-0.138^{* *} \\ (0.046) \end{gathered}$ | $\begin{gathered} \hline-0.166^{* *} \\ (0.064) \end{gathered}$ | $\begin{gathered} \hline-0.032 \\ (0.048) \end{gathered}$ | $\begin{gathered} \hline 0.195 * * \\ (0.060) \end{gathered}$ |
| Low Auth. - Low Pop. | $\begin{gathered} -0.251 * * * \\ (0.044) \end{gathered}$ | $\begin{gathered} -0.303^{* * *} \\ (0.061) \end{gathered}$ | $\begin{gathered} 0.242 * * * \\ (0.045) \end{gathered}$ | $\begin{gathered} -0.242 * * * \\ (0.057) \end{gathered}$ |
| Race (African American) | $\begin{gathered} 0.158^{* *} \\ (0.052) \end{gathered}$ | $\begin{gathered} -0.018 \\ (0.072) \end{gathered}$ | $\begin{gathered} -0.129 * \\ (0.054) \end{gathered}$ | $\begin{gathered} 0.080 \\ (0.067) \end{gathered}$ |
| Moral Traditionalism |  | - | - |  |
| Perceived Threat from "Newer Lifestyles" | - | - |  | - |
| Perceived Threat from Terrorism | $\begin{gathered} 0.064 * * * \\ -0.013 \end{gathered}$ |  |  |  |
| Party Identification | $\begin{gathered} 0.084 * * * \\ (0.009) \end{gathered}$ | $\begin{gathered} 0.096 * * * \\ (0.013) \end{gathered}$ | $\begin{gathered} -0.055 * * * \\ (0.010) \end{gathered}$ | $\begin{gathered} \hline-0.005 \\ (0.012) \end{gathered}$ |
| Ideological SelfPlacement | $\begin{gathered} 0.090 * * * \\ (0.013) \end{gathered}$ | $\begin{gathered} 0.186 * * * \\ (0.018) \end{gathered}$ | $\begin{gathered} \hline-0.020 \\ (0.013) \end{gathered}$ | $\begin{gathered} -0.041 * \\ (0.016) \end{gathered}$ |
| Gender (Female) |  | - |  |  |
| Income | $\begin{gathered} \hline 0.003 \\ (0.002) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-0.003 \\ (0.003) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 0.004 * \\ & (0.002) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-0.036^{* * *} \\ (0.009) \\ \hline \end{gathered}$ |
| Education | $\begin{gathered} \hline-0.029 * * * \\ (0.007) \end{gathered}$ | $\begin{gathered} \hline-0.047 * * * \\ (0.010) \end{gathered}$ | $\begin{gathered} \hline 0.031 * * * \\ (0.007) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-0.027 * * * \\ (0.003) \end{gathered}$ |
| Age |  |  |  |  |
| Attend Church at Least Weekly | - | - |  | - |
| Evangelical <br> Protestant | - | - | - | - |
| Mainline Protestant |  |  |  |  |
| Catholic |  |  |  |  |
| $* \mathrm{p}<.05, * * \mathrm{p}<.01, * * *<.001$ <br> Param. Est. = parameter estimate; Std. Err. = standard error Source: American National Election Study, 2016 |  |  |  |  |

## Table 8

## Support for Gay Rights

| Item | Support | Item | Support |
| :--- | :---: | :--- | :---: |
| Adoption by Gays |  | Required to Provide Services to Gay Couples <br> High Authoritarian High <br> Populist <br> High Authoritarian High <br> Populist | $35 \%$ |
| High Authoritarian Low <br> Populist | $57 \%$ | High Authoritarian Low <br> Populist <br> Low Authoritarian High <br> Populist | $58 \%$ |
| Low Authoritarian Low <br> Populist | $91 \%$ | Populist <br> Remaining | $92 \%$ |

However, the two most recent variables-support for required services for gays and transgender bathroom policy-have considerably lower support, particularly from the high authoritarian groups. Taken together, this makes sense, as both of these are more recent issues to play out among the American public. Research suggests authoritarianism structures preferences when the issue challenges established norms or goes against tradition (Hetherington 2009). The issues of adoption, marriage, and employment protection for gays are largely settled issues, especially since gay marriage was
legalized across the United States in 2015. The newer issues, like transgender bathroom policies, are more likely to elicit widespread authoritarian opposition because they present a greater challenge to established norms. Hetherington made a similar observation about the public opinion of gays in the military, which saw widespread support by 2004, when only a few years earlier it was much more controversial-finding that "once an issue becomes a relatively established practice, even those with the greatest concerns about differences will come around to accept that change" (Hetherington 2009).

As Hetherington's more rigorous model is implemented, the statistical significance of the relationships between the authoritarian-populist groups diminishes (Table 7a). The two controls that show the strongest relationship between support for gay rights are moral traditionalism and the perceived threat from newer lifestyles. The strength of these two variables is not surprising as they were highlighted by Hetherington as the strongest in his model. What is interesting, is that Traditionalists maintain a statistically significant and negative relationship ( -0.595 ) in support for gay rights even after accounting for all of the control variables. This means that moving from the moderate group to the traditional conservative group reduces support for gay rights by more than can be explained by demographic and social characteristics. This makes sense when considering the demographic profile (Table 5) of Traditionalists. This group, when compared to the Outsiders, are more educated, younger, and have higher incomes. All of this would indicate more support for gay rights, yet they were found to have the lowest support for gay marriage, protections from job discrimination, and providing services to gay couples.

After accounting for a wide range of explanatory variables, the relationship between the authoritarian-populist groups and support for gay rights is only strong among a single group (Table 7a). While there are some interesting implications of Traditionalists demonstrating the least support, gay rights does not appear to be a major point of distinction between the five groups. The overall results of this model appear closest to Hetherington's examination of support for gays in the military. This makes sense when you consider that the widespread support for gays in the military in 2004 is roughly equivalent to the widespread support for most gay rights issues in 2016.

## 2. Abortion

Relating to authoritarianism, Hetherington (2009) described authoritarians as viewing issues as black and white whereas non-authoritarians view more of the shades of grey, willing to consider carefully the intricacies of particular situations. For that reason, and the fact that high authoritarians are more religious and conservative, one would expect those in the high authoritarian groups to view abortion as a black and white issue and oppose it, whereas, non-authoritarians, would be more willing to understand that people face different circumstances and may need more options available to them. For this reason, one would expect the average non-authoritarian to be more supportive of abortion.

Thus, it is no surprise that support for abortion (Table 9) appears to be largely distinguished by authoritarianism. On a scale of 1 to 4 , with 4 being full access to abortion, the two high authoritarian groups are clustered near 2.5 , whereas the two low authoritarian groups are clustered near 3.5. There does appear to be a slight increase in support for abortion as one moves from low to high populism.

Table 9
Support for Abortion

| Abortion Self-Placement | Scale |
| :--- | :---: |
|  | 2.49 |
| High Authoritarian High Populist | 2.36 |
| High Authoritarian Low Populist | 3.53 |
| Low Authoritarian High Populist | 3.40 |
| Low Authoritarian Low Populist | 2.91 |
| Remaining | 2.94 |
| Total |  |
| Scale |  |
| 1-never permitted by law |  |
| 2-only in cases of rape, incest, or woman's life in danger |  |
| 3-by law, if need established |  |
| 4-by law, matter of personal choice |  |

In Table 7a, there are some interesting results. After controlling for all of the above factors, support for abortion between the two high authoritarian groups is very different. The Traditionalists are much less likely to support abortion when compared to the Ambivalents, whereas the Outsiders are much closer to the same level of support as the Ambivalents. This distinction implies that authoritarianism and populism are moving in opposite directions in effecting support for abortion. A possible explanation for this is the anti-establishment mentality of populists influencing their preference for the government (a group of establishment politicians) to impose orders on their lives. The Traditionalists are more willing to have an activist government put legal restrictions on abortion, which would seem to be related to a more favorable view of government officials.

## 3. Women's Rights

In Table 10, we see the net agreement to these four questions distinguished by the five groups. The results suggest that both authoritarianism and populism are impacting support for women's rights. The high authoritarian groups are least supportive of women's rights, but after segmenting by authoritarianism, the high populist groups demonstrate even less support for women's rights.

Table 10
Support for Women's Rights

| Item | Net Important |
| :--- | :---: |
| Important that more women get elected | $19 \%$ |
| High Authoritarian High Populist | $4 \%$ |
| High Authoritarian Low Populist | $47 \%$ |
| Low Authoritarian High Populist | $55 \%$ |
| Low Authoritarian Low Populist | $28 \%$ |
| Remaining | $30 \%$ |
| All | Net Better |
| Better if man works and woman | $51 \%$ |
| takes care of home | $43 \%$ |
| High Authoritarian High Populist | $14 \%$ |
| High Authoritarian Low Populist | $16 \%$ |
| Low Authoritarian High Populist | $34 \%$ |
| Low Authoritarian Low Populist | $32 \%$ |
| Remaining | Net Agree |
| All | $-13 \%$ |
| Do women demanding equality | $-35 \%$ |
| seek special favors | $-66 \%$ |
| High Authoritarian High Populist | $-81 \%$ |
| High Authoritarian Low Populist | $-40 \%$ |
| Low Authoritarian High Populist | $-45 \%$ |
| Low Authoritarian Low Populist |  |
| Remaining | Net Agree |
| All | $14 \%$ |
| Do women complaining about | $-25 \%$ |
| discrimination cause more problems | $-62 \%$ |
| High Authoritarian High Populist | $-78 \%$ |
| High Authoritarian Low Populist | $-37 \%$ |
| Low Authoritarian High Populist | $-38 \%$ |
| Low Authoritarian Low Populist |  |
| Remaining |  |
| All |  |
|  |  |
|  |  |

In Table 7a, the only group that maintains a statistically significant impact on support for women's rights after the control variables are the Outsiders. The Traditionalists, Post-Modernists and Elites are indistinguishable from the Ambivalents after the controls. A key question is why populism is impacting support for women's rights? Hochschild's (2016) description of the white working class conservatives she profiled
included the assertion that their position on gender roles was a unique point of distinction. Assuming the Outsiders group is representative of the people she profiled, this assertion is correct, as they are the only group to demonstrate a negative relationship after controlling for other variables.

## 4. Need for a Strong Leader

The preference for a strong leader is an attempt to address Mueller's (2016) claim that the link between populism and authoritarianism is that if populists have enough power, they will end up creating an authoritarian sate that excludes all those not considered part of the proper "people" (Mueller 2016, 4). An authoritarian state is associated with a strong leader, who exerts tremendous power over the government. This is not typically thought of as an American quality, where the federal government has an intricate system of checks and balances that leaves the President with relatively limited powers.

In Table 11, it is evident that support for a strong leader is heavily polarized by authoritarianism. The two high authoritarian groups are net $69 \%$ and $61 \%$ agree, while the two low authoritarian groups are net $19 \%$ and $28 \%$ disagree that the country needs a strong leader.

Table 11
Need for a Strong Leader

| Country needs a strong leader to take us back to true path |  |
| :--- | :---: |
| Net Agree |  |
|  | $69 \%$ |
| High Authoritarian High Populist | $61 \%$ |
| High Authoritarian Low Populist | $-19 \%$ |
| Low Authoritarian High Populist | $-28 \%$ |
| Low Authoritarian Low Populist | $31 \%$ |
| Remaining | $25 \%$ |
| Total |  |

This polarization is extreme, but makes sense when considering Hetherington's (2009) definition of authoritarianism as a need and desire for order. In an authoritarian's view, a strong leader is most likely to provide that order, whereas, the nonauthoritarian is more worried about a strong leader's encroachment on their freedom, and personal liberties. Hetherington found authoritarianism had a consistently large effect on a number of civil liberties questions-including support for warrantless wiretaps and opposition to opposing the President on terrorism. Hetherington also found that perceived threat of terrorism had a large impact on converging all views toward the authoritarian one. This was particularly true in the aftermath of the $9 / 11$ terrorist
attacks. This perceived threat may also be important in explaining the support for a strong leader as well, as those with higher fears of terrorism may want a strong leader to offer protection.

In the regression model, the perceived threat from terrorism is measured by the question: "How worried are you about a terrorist attack in the next 12 months." Those who say they are more worried about a terrorist attack have a higher level of perceived threat. Using the same control variables as Hetherington, the regression model is shown in Table 7a.

All four of the groups have very strong correlation in their support for a strong leader. The two high authoritarian groups have a positive effect on the need for a strong leader as you move from the moderate group and the two low authoritarian groups have a negative effect. However, there is evidence that high populism has a positive effect on the need for a strong leader, as moving from low to high populism within both sets increases the effect in a positive direction. This appears to provide some confirmation of Mueller's claim, but the effect is not large enough to say all populists with enough power will govern in an authoritarian style.

It is particularly interesting to consider the contradictions of a positive relationship between populism and support for a strong leader. The measure used to define populism was distrust in establishment politicians and the elites in society. One would think a negative view of this group would result in lower support for a strong leader. Perhaps the best explanation is that these populists think that strong leader would be more representative of what they view as the people. Maybe that strong leader would disrupt the current political establishment and social elites, an appealing proposition to the populists.

## 5. Torture

Support for torture of suspected terrorists appears to be a similar issue to the need for a strong leader as it relates to the tradeoff between safety and freedom. Along with being highly polarized by authoritarianism, support for torture is most likely heavily influenced by perceived fear of terrorism. In Table 12, the large polarization by authoritarianism is evident. The two authoritarian groups have a net favorable opinion of torturing suspected terrorists of $8 \%$ and $3 \%$, while the two low authoritarian groups have large negative favorability of $-47 \%$ and $-55 \%$.

Table 12
Favor Torture of Suspected Terrorists

|  | Net Favor |
| :--- | :---: |
| High Authoritarian High Populist | $8 \%$ |
| High Authoritarian Low Populist | $3 \%$ |
| Low Authoritarian High Populist | $-47 \%$ |
| Low Authoritarian Low Populist | $-55 \%$ |
| Remaining | $-13 \%$ |
| Total | $-18 \%$ |

However, when we use the same regression model as used for support of a strong leader, the results become more interesting. In Table 7b, after controlling for the other variables, the only group with a positive relationship for supporting torture (when compared to the Ambivalents) are the Outsiders.

This seems to correspond to support for a strong leader, which also had the highest support among Outsiders. There is clearly something unique about Outsiders that is not explained by demographic and social characteristics or even perceived threat from terrorism. They have demonstrably higher favorability for torture and the need for a strong leader, yet on issues like abortion and gay rights they have a more liberal position than Traditionalists.

## 6. Immigration

Immigration is another issue that was prominent during the 2016 elections. The expectation that authoritarianism is the primary driver of views on immigration appears to be true. In Table 13, the polarization in support for decreasing immigration levels is high structured by authoritarianism. The two high authoritarian groups have a net $61 \%$ and $57 \%$ favorable view of decreasing immigration, whereas the two low authoritarian groups have a net $1 \%$ and $-6 \%$ favorable view of decreasing immigration.

Table 13
Favor Decreased Immigration Levels

|  | Net Favor |
| :--- | :---: |
| High Authoritarian High Populist | $61 \%$ |
| High Authoritarian Low Populist | $57 \%$ |
| Low Authoritarian High Populist | $1 \%$ |
| Low Authoritarian Low Populist | $-6 \%$ |
| Remaining | $35 \%$ |
| Total | $31 \%$ |

However, once the control variables (race, party ID, ideology, income, and education) are factored in, the results change. In Table 7b, the only group that is associated with a statistically significant preference for decreasing immigration are the Outsiders. In this regression model, the Traditionalists appear indistinguishable from the Ambivalents, while both the Elites and to a lesser extent, Post-Modernists are more supportive of immigration. These results indicate both authoritarianism and populism, particularly when both are at the same extremes have a unique impact on preference for immigrants.

A possible explanation for this is the distinction between the economic and cultural impact of immigration. The authoritarians are more concerned with the cultural impact of new people with different people entering their communities. The populists are likely more concerned with the economic impact of immigration. They may be fearful that immigrants may take their job or even suspicious that the political establishment and economic elites in society are bringing immigrants into the country in order to lower wages and reduce dependence on American labor. When these views are combined in the Outsiders, the aversion to immigration is amplified.

## 7. Trade

Previous research and popular convention has associated opposition to trade with populism. To evaluate this, the same methods applied to gay rights will be used. However, in Table 14, there appears to be a significant relationship between both authoritarianism and populism as it comes to net support for increasing trade with other countries.

## Table 14

Support for Trade

| Is increasing trade with other countries good for the U.S.? |  |
| :--- | :---: |
|  | Net Good |
| High Authoritarian High Populist | $0 \%$ |
| High Authoritarian Low Populist | $20 \%$ |
| Low Authoritarian High Populist | $36 \%$ |
| Low Authoritarian Low Populist | $61 \%$ |
| Remaining | $25 \%$ |
| Total | $28 \%$ |

As you move towards high authoritarianism and high populism, support for trade decreases. This is different from gay rights, where support was clustered by level of authoritarianism. There is a dramatic range in net support, going from net $61 \%$ support for the Elites to net $0 \%$ support for the Outsiders. A possible explanation for this is that trade and the globalization associated with it is both a cultural and economic phenomenon. Hetherington (2009) demonstrated that authoritarians and non-authoritarians can
be distinguished by ethnocentrism and out-group preference. If trade and globalization are considered cultural, authoritarians would be expected to have much less support for interactions with "new" people from around the world than non-authoritarians. For populism, the concern is most likely economic, with recent research (Milanovic) connecting increased trade with greater economic inequality and discontent in western countries. An anti-establishment, anti-elite populist is likely to believe that trade agreements over the past few decades have largely benefitted the wealthy. They would understand decisions to outsource US jobs as a way of increasing profits, benefitting the management and shareholders at the expense of the employees who are now without a job.

In Table 7 b , even after the control variables are factored in, it is evident that the groups are distinct. Support for trade decreases as you move from the ambivalent group to the Outsiders, and increases as you move to the Elites. These two groups demonstrate very strong relationships with support for trade, and provide significantly more explanation than the control variables like income and education (See Table 7b).

Perhaps most interesting is that the two mixed groups, Traditionalists and PostModernists are close to the Ambivalents in support for trade, with Post-Modernists displaying a slightly negative relationship. This makes it clear that trade is not distinguished solely by authoritarianism or populism, and explains why opposition to trade resonates with large segments of both parties. It is particularly important for Republicans, who had previously run essentially as the free-trade party, meanwhile a large segment of conservatives are opposed to trade, a potential explanation for Donald Trump's strength in the primaries.

## 8. Financial Insecurity

The results in Table 15 are organized for the first item by netting those who are "moderately" to "extremely worried" against those who are "a little" to "not at all worried." The second item is organized by netting those who think there is "a moderate amount" to "a great deal" of opportunity in America to get ahead against those who think there is "little" to "none." The results indicate that financial insecurity is strongly related to populism, with the high populist groups reporting net $30 \%$ and $12 \%$ worry about their financial situation, compared to $-6 \%$ and $-17 \%$ for the low populist groups. Views of opportunity are similarly shaped by populism, with only $4 \%$ and $7 \%$ of the high populism groups saying there is opportunity in America to get ahead compared $50 \%$ and $60 \%$ for the low populism groups.

## Table 15

Financial Insecurity

| Item | Net Agree |
| :--- | :---: |
| Worry about financial situation |  |
| High Authoritarian High Populist | $30 \%$ |
| High Authoritarian Low Populist | $-6 \%$ |
| Low Authoritarian High Populist | $12 \%$ |
| Low Authoritarian Low Populist | $-17 \%$ |
| Remaining | $5 \%$ |
| All | $4 \%$ |
| See opportunity in America to get ahead |  |
| High Authoritarian High Populist | $4 \%$ |
| High Authoritarian Low Populist | $50 \%$ |
| Low Authoritarian High Populist | $7 \%$ |
| Low Authoritarian Low Populist | $60 \%$ |
| Remaining | $31 \%$ |
| All | $31 \%$ |

This is particularly interesting when you consider the demographic profiles of these groups. It makes sense that the Elites, with high education attainment and high incomes would be less worried about their finances and see more opportunity in America and that the Outsiders with less education and low incomes would feel the opposite way. However, one would not anticipate that the Post-Modernists would feel significantly more financially insecure than Traditionalists. The Post-Modernists have more education and earn more money than Traditionalists, yet they are more worried about their financial situation and see much less opportunity to get ahead.

In the regression model (Table 7b), the two measures of financial insecurity were combined into a single factor and controlled for race, party ID, ideology, income, and education. One would expect these variables to explain the vast majority of financial insecurity. However, that is not the case. All four groups demonstrate a statistically significant effect on financial insecurity when compared to the group of Ambivalents. The Outsiders and Post-Modernists have a positive effect on financial insecurity while the Traditionalists and Elites have a negative effect.

This proves that populism is the dominant factor corresponding to financial insecurity. A possible explanation for this is that a populist's anti-establishment and antielite attitudes make them feel as if the deck is stacked against them, regardless of their actual financial position.

Another possible explanation is the difference in peer comparison groups. Charles Murray, in his 2013 book, Coming Apart: The State of White America, 1960-2010, details the emergence of two distinct classes in American society-the new upper class
or "the cognitive elites" and the new lower class. He chronicles increasing segregation of "the cognitive elites" in locations he calls "SuperZips" around the country where nearly everyone has at least an undergraduate degree. Murray's work offers a potential explanation of the divergence in financial insecurity among the groups. With the two low authoritarian groups having by far the highest levels of education and income, they are likely to be concentrated in these "SuperZips." Meanwhile the two high authoritarian groups, with lower levels of education and incomes are living largely with each other. Among the two high authoritarian groups, Traditionalists likely feel more secure financially when they compare themselves to their peer group, which contains more Outsiders than Elites. The opposite is true for Post-Modernists, who feel greater insecurity when they compare themselves to their peer group filled with Elites.

## VI. Conclusions and Implications

Table 16 presents a summary of the statistically significant relationships obtained after controlling for symbolic attitudes and social characteristics. These results are the effect being a member of a particular authoritarian-populist group has on support for that issue (compared to the group of Ambivalents) that cannot be explained by factors like race, age, ideology, education, and income.

Table 16
Summary of Model Results

|  |  |  | $\begin{aligned} & n \\ & m \\ & m \\ & m \\ & m \end{aligned}$ |  |  | E. 0 0 0 0 | $\xrightarrow{\sim}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Elites |  |  |  | NEG*** | NEG*** | POS*** | POS*** | NEG*** |
| 2. Post Modernists |  | POS* |  | NEG*** | NEG** | POS** |  | POS** |
| 3. Traditionalists | NEG* | NEG** |  | POS** |  |  |  | NEG*** |
| 4. Outsiders |  |  | NEG*** | POS*** | POS* | NEG*** | NEG*** | POS*** |
| Blank $=$ not statistically significant; bold $=$ stronger relationship; ${ }^{*} \mathrm{p}<.05,{ }^{* *} \mathrm{p}<.01,{ }^{* * *}<.001$, one-tailed tests. POS = Positive; NEG = Negative |  |  |  |  |  |  |  |  |

It is clear that the issue preferences of the four groups are distinct with minimal overlap. This validates the hypothesis that populism and authoritarianism are not the same thing and validates this authoritarian-populist framework. Among the eight issues covered, the two high authoritarian groups-Outsiders and Traditionalists-only overlap on a single issue (desire for a strong leader). This is a clear indication that one factor, in this case authoritarianism, does not properly distinguish issue preference. The literature on authoritarianism, particularly Hetherington and Weilor's (2009)
exploration of polarization in American Politics, argues that many of the eight issues covered here should primarily be structured by authoritarianism. However, the results presented here suggest that adding the populist dimension results in significant differences between the two high authoritarian groups. The Outsiders produce more significant distinctions from the Ambivalents than the Traditionalists and appear to align more closely with what previous research has indicated are the issue positions of authoritarians.

Outsiders are against trade, desire a strong leader, favor torture of terror suspects, oppose women's rights, and are financially insecure. Combined with their demographic profile-as older, low education levels and low incomes, highly religious and the least likely to identify with a political party-this group seems to correspond well to previous descriptions of the white working class and right wing populism. This group also appears to be the major source of confusion in describing populism and authoritarianism. Previous research has conflated the political orientation of this group as representative of all populists and all authoritarianism, when in fact it is the unique result of the iteration between two distinct phenomena.

Traditionalists are against gay rights, against abortion, desire a strong leader, and are financially secure. This clearly aligns more closely with the issues that has defined the Republican Party in the recent past. Given their significant differences from Outsiders, it is no surprise they supported different candidates in the Republican primaries. The Traditionalists preferred Republican candidates other than Donald Trump in the 2016 primaries, while the Outsiders overwhelmingly supported Donald Trump. Trump's surprising success was likely the result of tapping into the issues that resonate with the Outsiders, who had not been satisfied with the Republican establishment on issues like trade and immigration. This group was less politically engaged because past candidates did not directly appeal to their particular issue set, but Donald Trump placed tremendous emphasis on nearly every one of the issues they care about.

The Elites and Post-Modernists are more closely aligned, agreeing on three out of eight issues (against a strong leader, against torture, and for immigration). However there are unique aspects of each group that are important. First, the Elites are unique in their support for trade and their financial security. While the Next Generation liberal are unique in their support for abortion rights and financial insecurity. With similar demographic backgrounds, these distinctions make it easier to understand the split support for Bernie Sanders and Hillary Clinton in the Democratic primary. The two issues of relevance are trade and financial insecurity. Sander's was explicitly against trade and decried income inequality and the lack of upward mobility. This appealed to Post-Modernists who were concerned about their financial situation and saw little opportunity to succeed in America. They were willing to support Sander's relatively radical economic agenda because of this financial insecurity and because they had no affinity towards trade. On the other hand, the Elites saw plenty of opportunity to succeed and were not worried about their financial situation. This, coupled with their unique support for trade, led to their support for Hillary Clinton, the establishment candidate.

They were probably turned off by Sander's economic plans because they have found success under the current economic system.

When all of this is combined, a clear demographic and issue profiles of these distinct groups is created. Given Trump's support by the high authoritarian-high populist group and Sander's support from the low authoritarian-high populist group we can classify both candidates as populist and Trump as uniquely authoritarian, which corresponds to some of the literature and explains the source of confusion. Additionally, issues themselves can be distinguished as primarily shaped by authoritarianism or populism. Desire for a strong leader, approval of torture, and immigration are primarily influenced by authoritarianism. Financial security, and to a lesser extent trade are heavily influenced by populism. The other issues-gay rights, abortion, and women's rights-are influenced by both.

In general, authoritarianism aligns more closely with cultural issues, while populism has a greater correlation to economic issues. This provides some clarity to the idea of "economic-populism" versus "cultural-populism" expressed in the current literature (Spruyt 2016; Lehman 2015; Judis 2016). Based on the results here, economic-populism appears to closely align with populism while cultural populism aligns more with authoritarianism.

The advantage of the authoritarian-populist framework is that these two phenomena do not need to be mutually exclusive, with the distinctions and areas of overlap becoming clear. A similar parallel exists between Mueller's (2016) distinction between left-wing populists and right-wing populists. The results in this paper show that adding authoritarianism to populism (Outsiders) results in a demographic profile that largely conforms with Mueller's right-wing populism, whereas populism with low authoritarianism (Post-Modernists) more closely resembles left-wing populism. However, the authoritarian-populist framework demonstrates that the having five distinct groups is superior to Mueller's two. For example, the main attribute of Mueller's right-wing populists-opposition to "the bottom of society"-are dispersed among both high authoritarian groups. The Outsiders have negative views of both immigration and women's rights, whereas the Traditionalists, while not opposed to societal elites, are opposed to gay rights.

This framework is particularly helpful in understanding the current state of American politics. The groups created through the interactions between authoritarianism and populism suggest that five unique political predispositions were present within the electorate before the rise of unusual candidates like Bernie Sanders and Donald Trump. These candidates found surprising success because the base of their support came from the two groups - the Post-Modernists and the Outsiders-who were not traditionally targeted by political candidates and tended to be less politically active. Mr. Sanders and Mr. Trump successfully appealed to these groups, awakening a sizable base of support that caught many off guard. While Taub (2016) found authoritarianism was the best predictor of support for Donald Trump in the 2016 primaries, the results presented here show little distinction in support for Trump among the two high authoritarian groups
(Outsiders and Traditionalists), similar to results found in Rahn (2016). However, primary support for the other 2016 Republican Presidential candidates among these two groups is highly divergent-with the Traditionalists more likely to support the nonTrump Republican candidates. Along with the clearly distinguished primary support among the two low authoritarian groups, this demonstrates a clear advantage of looking at authoritarianism and populism in a combined framework.

Moving forward, this framework demonstrates that candidates that can appeal directly to any one of these groups has the ability to activate a significant political base, potentially enough to take them to the White House. President Trump's base of support and strongest supporters are the Outsiders, who score high on authoritarianism and populism. Support among the other authoritarian group was high and will likely remain secure, although their loyalty to the Republican Party may present some problems should conflict between the more traditional Republican and the Trump administration develop. However, Trump's appeal to the other populist group, the PostModernists, likely presents the greatest potential weakness in his political coalition. Despite being overwhelmingly liberal, $17.6 \%$ of this group supported Trump in the primaries, not far below the $25.5 \%$ who supported Clinton. Their support, likely driven by Trump's populist rhetoric was likely critical to his narrow victory in the key swing states that delivered his victory in the Electoral College. If the first few months of the Trump administration are any indication, support among Post-Modernists is likely to decline. It appears that President Trump has embraced more pro-business policies than his populist and anti-elite campaign rhetoric indicated while at the same time more fully embracing positions that align more closely with authoritarian positions. For the Post-Modernists, who are very supportive of abortion rights and have a favorable view of immigration but view political and economic elites with suspicion, this shift may go too far. Future research would be useful in identifying how support for Donald Trump evolves among these five groups.

## References

Alvarez, R. M., \& Brehm, J. (2002). Hard choices, easy answers: Values, information, and American public opinion. Princeton University Press.

Bawn, K. (1999). "Constructing 'us': Ideology, coalition politics, and false consciousness". American Journal of Political Science, 303-334.

Burden, B. C., \& Wichowsky, A. (2014, October). "Economic Discontent as a Mobilizer: Unemployment and Voter Turnout". The Journal of Politics, 76(4), 887898. doi:10.1017/s0022381614000437

Cook, C. (2014, November 22). Trian Run. National Journal Magazine. Retrieved from http://cookpolitical.com/ story/8114

Dennis, J., Easton, D., \& Easton, S. (1969). Children in the political system: Origins of political legitimacy. McGrawHill Book Company, New York (ÉtatsUnis), $27,77$.

Easton, D. (1965). A framework for political analysis (Vol. 25). Englewood Cliffs, NJ: Prentice-Hall.

Erikson, R. S., \& Tedin, K. L. (2015). American public opinion: Its origins, content and impact. Routledge.

Feldman, S. (1988). "Structure and consistency in public opinion: The role of core beliefs and values." American Journal of political science, 416-440.

Feldman, S., \& Stenner, K. (1997). "Perceived threat and authoritarianism". Political Psychology, 18(4), 741-770.

Field, A. (2005). Regression. Discovering statistics using SPSS, 2, 143-217.

Gallup (2016, July 25). Clinton's Image at Lowest Point in Two Decades. Retrieved May 03, 2017, from http://www. gallup.com/pol1/193913/clinton-image-lowest-point-two-decades.aspx

Goren, P. (2004). "Political sophistication and policy reasoning: A reconsideration." American Journal of Political Science, 48(3), 462-478.

Greenstein, F. I. (1965). Children and politics (p. 185). New Haven \& London.

Gruber, L. (2016). "How political scientists got Trump exactly wrong". USAppAmerican Politics and Policy Blog.

Haidt, J. (2012). The righteous mind: Why good people are divided by politics and religion. Vintage.

Hetherington, M., \& Suhay, E. (2011). "Authoritarianism, Threat, and Americans' Support for the War on Terror." American Journal of Political Science, 55(3), 546-560. doi:10.1111/j.15405907.2011.00514.x

Hetherington, M. J. and Weiler, J. D. (2009). Authoritarianism and Polarization in American Politics. New York, New York: Cambridge University Press

Hochschild, A. R. (2016). Strangers in Their Own Land: Anger and Mourning on the American Right. New York: The New Press.

Inglehart, R., \& Norris, P. (2016) Trump, Brexit, and the rise of Populism: Economic have-nots and cultural backlash.

Judis, J. B. (2016). The Populist Explosion: How the Great Recession Transformed American and European Politics. New York, New York: Columbia Global Reports.

Kelsen, H. (1955). "Foundations of democracy". Ethics, 66(1, Part 2), 1-101.

Krieckhaus, J., Son, B., Bellinger, N. M., \& Wells, J. M. (2014). "Economic Inequality and Democratic Support." The Journal of Politics, 76(1), 139-151. doi:10.1017/s0022381613001229

Lehmann, C. (2015, August 22). The Pitchfork Billionaire. Retrieved November 10, 2016, from http://www.newsweek. com/donald-trump-populism-365052

Mather, R. D., \& Jefferson, K. W. (2016). "The Authoritarian Voter? The Psychology and Values of Donald Trump and Bernie Sanders Support." Journal of Scientific Psychology, 1-8.

Martin, J. G. (1964). The tolerant personality (No. 15). Wayne State University Press.

Martinelli, E. B. A. (2016). Beyond Trump.

Mead, W. R. (2011). "The Tea Party and American foreign policy: What populism means for globalism." Foreign Affairs, 28-44.

Milanović, B. (2016). "Global inequality: a new approach for the age of globalization." Cambridge, MA: The Belknap Press of Harvard University Press.

Mondak, J. J. (2010). Personality and the foundations of political behavior. Cambridge University Press.

Mueller, J. (2016). What Is Populism? Philadelphia, Pennsylvania: University of Pennsylvania Press.

Murray, C. (2013). Coming apart: The state of white America, 1960-2010. New York: Crown Forum.

Norris, P. (2016). "It's Not Just Trump: Authoritarian Populism Is Rising Across the West; Here's Why". The Washington Post.

OnTheIssues. (I). Donald Trump on Free Trade. Retrieved April 04, 2017, from http://www.ontheissues.org/2016/Donald_Trump_Free_Trade.htm

OnTheIssues. (II). Bernie Sanders on Free Trade. Retrieved April 04, 2017, from http://www.ontheissues.org/2016/ Bernie_Sanders_Free_Trade.htm

Packer, G. (2015, September 7). The Populists. Retrieved November 10, 2016, from http://www.newyorker.com/maga-zine/2015/09/07/the-populists

Packer, G. (2016, October 24). "Hillary Clinton and the Populist Revolt". Retrieved November 1, 2016, from http://www.newyorker.com/maga-zine/2016/10/31/hillary-clinton-and-the-populist-revolt

Rahn, W., \& Oliver, E. (2016, March 09). "Trump's voters aren't authoritarians, new research says. So what are they?" Retrieved December 04, 2016, from https://www.washingtonpost.com/ news/monkey-cage/wp/2016/03/09/ trumps-voters-arent-authoritarians-new-research-says-so-what-are-they/?utm term=.b11a429e3781

Real Clear Politics (2016). 2016 Democratic Popular Vote. Http://www.realclearpolitics.com/epolls/2016/president/ democratic_vote_count.html.

Smith, M. B., Bruner, J. S., \& White, R. W. (1956). "Opinions and personality".

Stenner, Karen. (2005). The authoritarian Dynamic. New York, New York: Cambridge University Press.

Silver, N. (2015, November 24). "Dear Media, Stop Freaking Out About Donald Trump's Polls." Retrieved May 01, 2017, from http://fivethirtyeight.com/features/ dear-media-stop-freaking-out-about-don-ald-trumps-polls/

Taub, A. (2016, March 01). "The rise of American authoritarianism." Retrieved October 10, 2016, from http://www.vox. com/2016/3/1/11127424/trump-authoritarianism

White, J. K. (2016). "Donald Trump and the Scourge of Populism." The Forum, 14(3). doi:10.1515/for-2016-0026

White, B., McCaskill, N. D., \& Breland, A. (2016, April 03). "Trump and Sanders’ common cause." Retrieved May 03, 2017, from http://www.politico.com/sto-ry/2016/04/donald-trump-bernie-sand-ers-trade-221506

Williamson, V., Skocpol, T., \& Coggin, J. (2011). "The Tea Party and the remaking of Republican conservatism." Perspectives on Politics, 9(01), 25-43.

# When P*ssy Grabs Back: An Examination of the Gender Gap in the 2016 Presidential Election 

By Katie Gilroy*


#### Abstract

Since the 1980 Presidential Election, there has been a significant voting gender gap in that women tend to vote more for Democratic candidates than men. There is no doubt that the gender gap persisted in 2016. However, several unusual factors had the potential to affect the way the gap presented itself. The hypotheses were tested by analyzing the relationship between gender and other demographic variables such as race, income level, and education in relation to vote choice, using data from the Cooperative Congressional Election Study for 2008, 2012, and 2016. The results show that women's probability of voting for the Republican candidate tends to increase or decrease along with men's within several of the demographics tested. The gap remained proportional to that of previous years, but certain demographics saw a shift in the probability that they would support the Republican candidate and some new variables became significant influences.


Keywords: Gender Gap, Voting, 2016 Presidential Election, Hillary Clinton, Donald Trump.

## I. Introduction

Throughout the 2016 Presidential campaign season, women and the issues that affect them were greatly emphasized on several occasions. The spotlight was heavily focused on women so often for a number of reasons. First and foremost, Hillary Clinton was the first woman to win a major party nomination for President. Beyond her historic candidacy, women's issues were also a prominent feature of this election because of trends in past elections, one of these trends, of course, being the gender gap. The narrative of the Democratic Party that Republicans are waging a war on women contributed to the focus on women's issues as well. Finally, the candidacy of Donald Trump was probably the most significant contributor to the role women's issues played in this campaign season. From the outset of Trump's campaign, he made derogatory comments about women, said abortion should be punishable, and was recorded making comments about his uninvited advances on women, to name only a sampling of instances that many found troubling. Trump's unflattering campaign moments made good fodder for attack ads and the media. Despite this, however, he managed to hold onto to a substantial number of supporters and went on to win the Presidency.

[^2]What is noteworthy about the support Trump received is from where that support came. According to analysis from FiveThirtyEight released in October, if only women voted, Hillary Clinton would have won by a landslide, garnering 458 electoral votes, and just 80 going to Trump. In every presidential election since 1980, there has been a statistically significant gender gap (Carroll, 2006). The gender gap presents itself with a larger proportion of women voting for the Democratic candidate and men for the Republican candidate. Therefore, Trump's unpopularity among women in this analysis and others is not totally surprising and not completely due to his inflammatory comments and actions throughout the campaign. There was no doubt that that there would be a gender gap in 2016 and the disparity between women's and men's vote choice could even have seen an increase over past elections.

So, did the gender gap present itself in an unusual way due to the abnormal campaign leading up to the election? Voter choice could reflect people's aversion to the words and actions of a candidate. This raises the question: was the gender gap consistent throughout the 2016 election cycle despite certain incidents? At each stage in the campaign, did the same proportion of women and men cast their vote for a certain candidate? On the other hand, could more women than men have been alienated by developments about Trump's attitude toward women and women's issues? The result of this being that as the campaign progressed the gender gap might have fluctuated along with certain events. However, in the past, women's issues have actually not played a large role in shaping the gender gap. Does this hold true for 2016? Additionally, how did men's voting behavior affect the formation of gender gap? Women are most often the focus of research on the gender gap, but men also have a role to play. The fact that Hillary Clinton was the first female major party nominee could also have had a significant impact on voting decisions. However, it has been shown in the past that women do not simply vote for female candidates based on identity alone. Under these circumstances, is the gender gap in 2016 actually more pronounced than in past elections or was it less influential than perhaps the education gap? Overall, it seems that the 2016 election campaign could have had an exacerbating effect on the gender gap.

There has been a great deal of research done on the gender gap in the past. When women first gained the right to vote, it was assumed that there was no difference in the way that they voted as compared to men. However, this notion was disproven in 1980 when a significantly larger proportion of women voted for the Democratic candidate, Jimmy Carter. Since the emergence of the gender gap, many have sought to understand what drives the difference between the voting patterns of women and men. Many have attributed the differences to women's greater tendency to support larger government in the form of social welfare programs (Deckman, 2004). Women are more likely to support these programs for a few reasons, one being that they are more likely to benefit from them. Interestingly, women's issues like abortion and the right to choose have very little influence on the gender gap.

While I will be utilizing prior research into the gender gap to inform my own, there are several aspects of my research that will differentiate it from what has previously
been done. Since the election occurred only a few months before I began my research, I am contributing a more recent analysis of the gender gap, focusing on whether women's issues had a greater influence on voting than in the past. The circumstances of this election were quite abnormal, due in part to both major party candidates, and the increased focus on women's issues may have caused women to base their vote more on their opinions about these issues than in previous elections. Finally, I will analyze the gender gap over the course of the 2016 campaign. Many specific incidents related to women's issues throughout the year garnered a lot of attention from the public and the media. As the campaign progressed, these moments could have affected women more strongly than they affected men. In my analysis over the course of the whole election, I will determine if any fluctuations in the gender gap have a correlation to certain events.

Overall, my research will be significant because it will contribute analysis based on new information. The 2016 Presidential election was unusual and different from any past election in many ways. I will determine through my research and analysis whether the gender gap deviated from the norm as well.

## II. Review of the Literature

## An Overview of Voting Behavior

There are many factors that impact and shape the electoral decisions and behavior of the American Voter. The most significant factor is that most American voters find themselves drawn to one party more than the other. Additionally, voters' decisions can be significantly influenced by their affiliation with certain groups, whether these are unions, religious groups, or demographic groups based on race or gender (Lewis-Beck, 2008). Demographics, in general, are a strong predictor for voting behavior as well.

Partisanship is a prominent fixture of American politics and it has substantial impacts on vote choice. There is a widely held belief that party loyalty is the most important factor in voting decisions for Presidential elections (Cantor, 1975). A majority of Americans find that they identify strongly or lean more towards one party than the other, although the number of people identifying themselves as Independents has increased over the past few decades (Lewis-Beck, 2008). This element is the result of the long-standing two-party system in the United States, which has made it impossible for a third party to seriously take hold. Thus people tend to feel some loyalty to either the Republican or Democratic Party, but this tendency raises questions about how much vote choice can be interpreted as party loyalty (Cantor, 1975).

Social groupings are another important feature of Americans' lives that influence their voting behavior. These groupings do not have any direct links to politics, but can still have an effect on the vote of its members. During an election campaign, groups are often referred to as voting blocs, such as the "black vote", the "union vote", the "women's vote", etc. (Lewis-Beck, 2008). How strongly someone identifies with a certain group can determine whether or not they vote in line with other members.

Outsiders of a group may also be motivated by its influence, in a negative sense, and vote against the group's interest because they do not feel that the group's influence will benefit them (Huddy, 2009).

Demographics can also be helpful in predicting voting behavior. Race, gender, religion, economic status, education level, and marital status are among some of the most powerful forces (Lewis-Beck, 2008). Each of these demographics has certain characteristic voting tendencies. For example, people with higher levels of education are more likely to vote for a Democratic candidate. Liberal voting tendencies are often associated with unions, people of color, and women as well. People who have higher incomes are more likely to vote for Republicans; older people are also more likely to vote for conservative candidates than young people do. In some cases, it can be difficult to differentiate these trends and to determine the true driving force behind voting decisions. For instance, black voters tend to vote overwhelmingly Democratic. However, other crossover demographics such as income or education level can account for some of this trend (Nagler, 2013).

## Background of the Origination of the Gender Gap

A gender gap is traditionally defined as the difference in the percentage of women and the percentage of men who vote for a particular candidate. The first appearance of the gender gap in U.S. Presidential elections was in 1980 when Ronald Reagan ran against Jimmy Carter. Before this time, it was thought that men and women voted similarly and held similar opinions on most issues (Carroll, 2006). Since 1980 however, this view has shifted completely and gender is considered to have a great impact on the way a person votes. Now, a significantly larger percentage of women vote Democratic, while men more often identify with Republicans. The effect of the gender gap can be observed at all levels of politics, with some deviation, not just in Presidential elections.

Generally, women have more liberal views on issues like tax policy, gay rights, welfare spending and the role of government (Deckman, 2004). In 1980, only $46 \%$ of women voted for Reagan compared to $54 \%$ of men, resulting in a gender gap of $8 \%$ (Carroll, 2006). This disparity has been observed in every election since and there has been much research into what drives this gap. From this research, many explanations have been offered in order to understand the gender gap. While some have tried to assert that the gender gap is not actually due to gender but rather to subgroups such as race, age, marital status, parental status, etc., this claim has been mostly disregarded. It is not at all supported by data as it can be observed that the gender gap remains relatively consistent across several different demographics (Carroll, 2006). One of the more commonly cited reasons for the gender gap is the "compassion explanation." This explanation attributes women's more liberal political beliefs to differences in biology and socialization. Since women are traditionally mothers and caregivers, this theory connects maternal thinking to women's value of cooperation over competition and individual rights. Another explanation for the gender gap is women's views on the
role of government. Women are more likely than men to support larger government for a number of reasons. For example, women are more likely to be economically disadvantaged than men and tend to be supportive of social welfare programs that provide people with a safety net. Women also are typically more concerned about equal opportunities than men, which they associate with the government creating regulations and more social welfare. Other findings also suggest that when considering certain issues, women tend to take into account the situation for the nation as a whole, while men weigh their personal and family situations more heavily. Additionally, men are less supportive of social safety nets so both tendencies combine to support more women identifying with the Democratic Party than men (Deckman, 2004).

## The Gender Gap and Female Candidates

The gender gap as it relates to women voting for female candidates is a more complex issue. A portion of votes for a female politician can be attributed to in-group favoritism. However, women take into account several factors in addition to the gender of the candidate, not simply voting for a woman because of her gender (Huddy, 2009). Women are loyal to their in-group only to a point; other demographics, such as race, can elicit greater in-group loyalty among voters. What is also important to women is a candidate's party affiliation and beliefs. These factors can often overrule other considerations.

As has been discussed, women are stronger supporters of social services and welfare than men and these issues greatly affect the way they vote. This fact can contribute to the gender gap in lower turnout, non-Presidential elections because of the stereotype that a female candidate is more liberal and supportive of women's issues. However, if voters have any knowledge of the candidate's ideology, the gender gap can disappear. This phenomenon is demonstrated in the 2008 presidential election when Sarah Palin was the Republican Vice-Presidential nominee. The hope for John McCain was that Palin would attract female voters who were disappointed that Hillary Clinton was not the Democratic nominee for President. Her nomination did not have the desired effect though because of Palin's conservative ideology (Huddy, 2009). Women voters do show some bias toward female candidates so long as the candidate is a proponent of issues that are of most concern to women.

Besides the politics of a female candidate, other factors can resonate more than gender with women voters as well. The 2008 Democratic primary provided a unique opportunity to see how gender affects vote choice while controlling for ideology. Analysis of the voting results show that women did have some in-group bias towards Hillary Clinton because she is a woman (Huddy, 2009). This applied to women across most demographics, except race. African American women supported Barack Obama over Clinton by a double-digit margin, therefore identifying more strongly with a candidate who shared their racial identity than their gender identity (Simon, 2008). While gender does exert some influence on women voters, there are many other factors that can take precedence when they are making their choice.

## Men's Role in Shaping the Gender Gap

Many studies focus on the role that women's changing political opinions have on shaping the gender gap. However, men have played a major, if not larger, part in creating the gap. As has been established, before 1980, men and women identified with the Democratic and Republican parties in similar proportions. Women's greater support of the Democratic Party has been relatively consistent from 1948 to the present, only dipping below $50 \%$ for a brief time around 1956. Originally, men supported the Democratic Party by a larger percentage as well. After 1964, however, men's support for the party steadily declined as their support for the GOP began increasing (Kaufmann, 1999). Although, many researchers have focused on how women shape the gender gap, men have actually contributed to its development significantly.

Researchers who have investigated men's effect on the gender gap put forth a few explanations for their change in voting behavior over time. Some attribute the gender gap to attitudinal differences and differences in issue salience between men and women are found to be a major factor. Similar to earlier discussion of women's political attitudes, many researchers attribute men's role in the gender gap to their attitudinal differences. Social welfare seems to be one of the defining factors for the gender. Men have always had a more conservative view of social welfare than women. However, it was not until the mid-60s and 70s that men's party preference aligned with their ideology. The shift came about as a result of a new wave of Republicanism that emphasized partisan conflict over "big government", making social welfare a more salient issue (Kaufman, 1999). This movement began in the 60s and came to head in the 80s with the help of Ronald Reagan.

In trying to explain men's attitudinal differences over social welfare, some have turned to psychology to determine the reason it became such a salient issue for men. Specifically, men view any weakness or dependency as linked to feminine qualities. Thus, men have an aversion to anything that could imbue these qualities upon them because they have a subconscious fear of being perceived to be less masculine. Republicans have used this to their advantage and painted issues of social welfare as issues of weakness. Ronald Reagan was a strong proponent of this view, at one point stating that the U.S. should "wean [itself] from the long misery of overtaxing, overspending and the great myth that our national nanny knows best" (Ducat, 2004). Connecting liberal policies with weakness and femininity has driven men to the Republican Party in greater numbers over the last half-century.

## III. Methodology

One of the major questions that this research hopes to answer is how the gender gap developed over the course of the entire 2016 campaign. Comments and actions of the candidates could have caused men and women's support to diverge at different points throughout the campaign. To determine if support for the candidates fluctuated
over time, trend graphs of men's and women's potential vote were created based on polls periodically released by Quinnipiac University from 2015 to 2016. These graphs can be matched to a timeline of events to potentially connect certain events to any changes in the gender gap. Graphs for the 2008 and 2012 Presidential Elections were created to compare the behavior of the gap from one year to another.

This research also tests the effect of gender on vote choice when controlling for several other factors including race, education, income level, marital status, party identification, and policy positions. These factors are controlled by performing a binary logistic regression analysis of gender and each of the variables. This determines if the variables have a significant impact on a person's vote choice and whether the relationship between the control variables and the dependent variable (vote choice) is positive or negative. The next portion of analysis focuses on the interaction between gender and variables for race, education, income level, marital status, and party identification. Interaction analysis aids in determining how gender and other variables impact one another or if they have an independent influence on vote choice.

Performing regression analyses of vote choice and controlling for policy positions will help to determine if women's issues played a greater role in the gender gap in this election. In the past, the gender gap has been explained by women's beliefs about the role of government. However, this election has been unusual because there have been so many incidents that could have potentially alienated a greater proportion of women than men from Donald Trump.

Finally, the coefficients for each of the variables are used to calculate the likelihood that a person will vote for the Republican candidate in the election. As a result, the change in the effect of certain variables can be compared from one election to another. Calculating the probabilities of men and women makes the results easier to compare the gender gap across time.

Polling data from the Cooperative Congressional Election Study for the years 2008, 2012, and 2016 will be used to complete this analysis. The survey has a sample size greater than 50,000 people and has two waves, one pre and one post-election questionnaire. The first wave is conducted from September to October and asks questions about political attitudes, and demographic factors. The second wave is administered in November and asks questions mostly related to the actual election.

## IV. The Gender Gap Over the Course of Campaigns

## Data Collection

Overall, in 2016, it appears that the gender gap was significantly wider and more erratic over the course of the campaign than in the past two elections. As can be seen in Figures 1 and 2, the majority of the time there was a gap of about 10 to 20 points between men and women voting for Hillary Clinton and Donald Trump. In both the 2008 and 2012 campaigns, the gender gap fluctuated between a low of 3 points and a high of 14 .

Figure 1
Support for Hillary Clinton in 2016


Data Source: Quinnipiac Poll

Figure 2
Support for Donald Trump in 2016


Data Source: Quinnipiac Poll
At the outset of the campaign, the gender gap was at an expected level, as compared to 2008 and 2012, of 8 or 9 points. From the end of May 2015, the gap continually increased until a peak in November 2015 at nearly a 20-point difference. Over the course of this timeframe, Trump made many disparaging remarks about several people,
most of whom were women including Megyn Kelly, Rosie O’Donnell and Carly Fiorina. These attacks were largely based on superficial issues such as insinuating Megyn Kelly was on her period or insulting Carly Fiorina's looks. As the number of these attacks increased, Trump may have driven away more and more women partially explaining the growth of the gender gap.

From November 2015 to February 2016, the gap descended to its original level of 8 or 9 points. Trump continued to make inflammatory statements, many offensive towards women; but the trend of the gender gap did not reflect any potential concern on the part of women. Also over this period, an inspector for the FBI stated that some of the emails on Clinton's private server were classified. This development may have contributed to the decrease in support for Clinton during the period from November to February.

In the beginning of June 2016, there is a sharp spike in the gender gap. The difference between women and men in support of Hillary increases by 9 points to a 19-point gap. For Trump, the difference between men and women increased by 12 points to a 21-point gap. Since the previous poll, Trump had body-shamed Ted Cruz's wife, stated he thought women should be punished for having abortions, among other offensive statements. The decrease in the percentage of women who supported him could be tied to these statements. It seems that Trump's comments did not affect men in support of him as the percentage saw an increase in this period.

After the spike in June 2016, the gender gap decreased slightly but still remained in the mid to high teens. In September 2016, the gap dropped to its lowest level. Earlier in the month, Clinton had said that Trump supporters belonged in a "basket of deplorables," which could explain the decrease in support for her overall at this time. Shortly after, the size of the gap increased again in mid-October, most likely due to the recent discovery of the Access Hollywood tape in which Trump is heard making many crude comments, some which can be classified as sexual assault. While this development was one of the most shocking, not as many of his supporters seemed to be driven away as they had in the past. This could have to do with the fact that on the same day that the tape was released, WikiLeaks released emails from John Podesta, Clinton's campaign chairman, that revealed some content from Clinton's speeches to Wall Street.

The final breakdown of the gender gap for 2016 was 13 points for Hillary Clinton and 11 points for Donald Trump (see Figure 3). This is an apparent increase over previous years. In 2012, the gender gap was 10 points for Barack Obama and 8 points for Mitt Romney, and in 2008, the gap was 7 points for Barack Obama and 5 points for John McCain. While the end results for 2016 were not as dramatic as some points during the campaign, there was a clear increase over the past two elections.

Figure 3
Exit Poll Support for Candidates in 2016


Data Source: The New York Times

## V. Data Analysis

## Logistic Regression Analysis

In this analysis, vote choice is the dependent variable, gender is the primary independent variable, and other demographic variables are independent controls. The variable for vote choice is coded as 1 for the Republican candidate and 0 for the Democratic candidate. As a result, variables that have positive coefficients are more likely to vote for the Republican and those with negative coefficients are less likely.

The Female, Republican, Democrat, Black, Hispanic, Married, High School Educated, College Educated, Low Income, and Middle Income variables are included in this first regression model. The results are shown in Table 1. Income and education variables are absent in 2008 due to a lack of responses for those questions. Every variable had a significant impact on vote choice in each election year. The Female variable had a negative relationship to vote choice in all years, and its effect increased with each election. In 2012 and 2016, the Republican and Democrat variables have equal impacts on vote choice; the Republican variable has a positive relationship, while the Democrat variable was negative. Interestingly, although the Black variable had a negative relationship to vote choice across all three elections, its effect decreased with each one. The Hispanic variable had a negative relationship to vote choice all three years, and the Married variable had a positive relationship in each election. However, neither one of these variables moved in a consistent direction in terms of their effect from election to election. The variables for high school and college education both had positive
relationships to vote choice in 2012, and their effects more than or almost doubled in 2016. Both income variables had positive relationships to vote, and each increased slightly in 2016.

## Table 1

Beta Coefficients for Regression Analysis of Gender and
Demographic/ Identity Variables

| Variable | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 6}$ |
| :--- | :---: | :---: | :---: |
| Female | $-0.349^{*}$ | $-0.394^{*}$ | $-0.439^{*}$ |
| Republican | $2.155^{*}$ | $2.850^{*}$ | $2.495^{*}$ |
| Democrat | $-0.718^{*}$ | $-2.912^{*}$ | $-2.567^{*}$ |
| Black | $-2.939^{*}$ | $-2.308^{*}$ | $-1.755^{*}$ |
| Hispanic | $-0.436^{*}$ | $-0.768^{*}$ | $-0.648^{*}$ |
| Married | $1.028^{*}$ | $0.800^{*}$ | $0.806^{*}$ |
| High School Educated | - | $0.565^{*}$ | $1.324^{*}$ |
| College Educated | - | $0.340^{*}$ | $0.650^{*}$ |
| Low Income | - | $0.223^{*}$ | $0.231^{*}$ |
| Middle Income | - | $0.215^{*}$ | $0.275^{*}$ |

*Significant ( $\mathrm{p}<.05$ )

In order to calculate the probability of a man or woman voting for the Republican with all other factors held constant, the probability of white, college educated, middle income, married men and women was calculated to show the gap. Education and income variables are missing from the 2008 model, so the probabilities are not as directly comparable to 2012 and 2016. That being said, the gender gap was about $7 \%$ in 2008. The gap grew to nearly $9.5 \%$ in 2012, and then decreased to just over $8 \%$ in 2016, a slight increase over 2008.

## Interaction AnaLysis

The following analysis shows how gender in combination with other variables affects vote choice in the 2008, 2012, and 2016 Presidential Elections. Each model includes a variable for gender, at least one demographic variable, and a variable that represents the interaction between the two. If the interaction variable is significant, it indicates that the combination of gender and the demographic factor has an added impact on vote choice on top of their influence individually.

## A. Gender and Party Identification

The model for gender and party identification includes the Female, Republican, Democrat, Female Republican, and Female Democrat variables and the results are
shown in Table 2. In this model, independent voters are the reference category. All of the variables were significant except for Female Republican in 2012 and Female Democrat in 2016. The Female and Democrat variables were significant and had a negative relationship to vote choice in all three elections. Until 2016, the Female Democrat variable was not significant. Therefore Democratic women voters were less likely to vote for the Republican in 2016 not only because they are Democrats or women, but because the interaction between the two factors has a significant impact on vote choice. Republican and Female Republican always have a positive relationship to vote choice. Even when controlling for party identification, a gap still exists between men and women's likelihood of voting for the Republican.

## Table 2

Beta Coefficients for Interaction Analysis Between Gender and Party Identification

| Variable | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 6}$ |
| :--- | :---: | :---: | :---: |
| Female | $-0.637^{*}$ | $-0.427^{*}$ | $-0.416^{*}$ |
| Republican | $1.972^{*}$ | $2.841^{*}$ | $2.445^{*}$ |
| Democrat | $-0.880^{*}$ | $-3.263^{*}$ | $-2.735^{*}$ |
| Female Republican | $0.566^{*}$ | 0.155 | $0.203^{*}$ |
| Female Democrat | $0.430^{*}$ | $0.237^{*}$ | 0.040 |

*Significant $(\mathrm{p}<.05)$

## B. Gender and Race

The model for gender and race includes the variables Female, White, and White Female and the results are shown in Table 3. Each variable across all three years was significant in impacting vote choice. The effect of the Female variable has an increasingly negative relationship to vote choice, so with each election women voters are less likely to vote for the Republican. In 2016, the relationship between white voters and vote choice remained positive and has increased overall since 2008. White women voters showed a steady increase in the variable's positive relationship to vote choice.

> Table 3
> Beta Coefficients for Interaction Analysis Between Gender and White/Nonwhite

| Variable | 2008 | 2012 | 2016 |
| :--- | :--- | :--- | :--- |
| Female | $-0.621^{*}$ | $-0.863^{*}$ | $-0.892^{*}$ |
| White | $0.877^{*}$ | $1.063^{*}$ | $0.961^{*}$ |
| White Female | $0.343^{*}$ | $0.423^{*}$ | $0.612^{*}$ |

*Significant ( $\mathrm{p}<.05$ )

In 2008 , white men were $6.87 \%$ more likely to vote for the Republican candidate than white women. The gap widened in 2012 when white men's likelihood of supporting the Republican increased while white women's decreased. However, in 2016, the gap was relatively similar to its level in 2008 at $6.06 \%$ because men's support of the Republican decreased while women's remained virtually the same.

## C. Gender and Education

The model for gender and education includes the Female, College Educated, and College Educated Female variables. The results are shown in Table 4. In both 2012 and 2016, all the variables had a significant impact on vote choice. The Female and College Educated Female variables had negative relationships to vote choice in both elections. However, the college variable changed from a positive to negative relationship from 2012 to 2016. Between 2012 and 2016, the likelihood of college educated women voting for the Republican decreased, while the likelihood that college educated men would vote for the Republican increased negligibly. As a result, there was a nearly 5\% increase in the gap from 2012 to 2016.

Table 4
Beta Coefficients for Interaction Analysis Between Gender and College Education

| Variable | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 6}$ |
| :--- | :---: | :---: | :---: |
| Female | - | $-0.381^{*}$ | $-0.324^{*}$ |
| College Educated | - | $0.209^{*}$ | $-0.076^{*}$ |
| College Educated Female | - | $-0.244^{*}$ | $-0.128^{*}$ |

*Significant ( $\mathrm{p}<.05$ )
D. Gender and Income

The model for gender and income includes the Female, Low Income, Middle Income, Low Income Female, and Middle Income Female variables and the results are shown in Table 5. In this model, high income serves as the reference category. In 2012, only the Female and Middle Income variables were significant. However, in 2016, Female, Low Income, and Middle Income were all significant. There is a positive relationship between vote choice and both low and middle income, and the coefficient for middle income increased considerably over 2012. Despite being insignificant in 2012 for this model, the low-income variable changes from negative to positive just as it did in the model for low-income alone. In the model, high income is considered zero and as a result, middle-income were voters more likely to vote for the Republican than high-income voters, and low-income voters were more likely to vote for the Republican than middle-income voters in 2016.

Table 5
Beta Coefficients for Interaction Analysis Between Gender and Income Level

| Variable | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 6}$ |
| :--- | :---: | :---: | :---: |
| Female | - | $-0.555^{*}$ | $-0.397^{*}$ |
| Low Income | - | -0.020 | $0.298^{*}$ |
| Middle Income | - | $0.183^{*}$ | $0.264^{*}$ |
| Low Income Female | - | 0.082 | -0.046 |
| Middle Income Female | - | -0.010 | 0.008 |

*Significant $(\mathrm{p}<.05)$

## E. Gender and Marital Status

The model for gender and marital status includes the Female, Married, and Married Female variables and the results are shown in Table 6. The Female variable is significant and has a negative relationship to vote choice across all three elections. The Married variable is significant and has a positive relationship to vote choice in all three elections. The Married Female interaction variable was significant in all three elections and it had a positive relationship to vote choice in 2016, but the effect had decreased since 2008. The gap between the likelihood of married men and women voting for the Republican in 2016 was relatively similar to the gap in 2008. There was an increase in the gap in 2012 due to men's likelihood increasing while women's decreased. Overall, support for the Republican declined from 2008 to 2016.

## Table 6

Beta Coefficients for Interaction Analysis Between Gender and Marital Status

| Variable | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 6}$ |
| :--- | :---: | :---: | :---: |
| Female | $-1.557^{*}$ | $-0.365^{*}$ | $-0.618^{*}$ |
| Married | $0.927^{*}$ | $1.220^{*}$ | $0.806^{*}$ |
| Married Female | $1.243^{*}$ | $-0.199^{*}$ | $0.274^{*}$ |

*Significant $(\mathrm{p}<.05)$

## Policy Opinion and Vote

Previous research into the gender gap shows that the gap is usually the result of the differing policy views of men and women. By controlling for gender and opinion on different policies, the effect of certain opinions on vote choice can be determined.

## A. Immigration

During the 2016 campaign, immigration reform and border protection were salient issues. Supporters of increasing the number of border patrols were much more likely to vote for the Republican candidate. In 2012, there was not much of a gap between men and women (only 1\%), but it increased in 2016 (to 6\%) because men's likelihood of support increased, while women's remained relatively stable.

## B. Social Issues

Women's issues like a woman's right to choose have been shown not to have a significant impact on the gender gap. However, women are usually more likely to support social issues like gay marriage than men. When gender and support for abortions only in the case of rape, incest, or danger to the mother are controlled, women are about 7\% less likely to vote for the Republican than men. The gap remained virtually the same from 2012 to 2016. The likelihood of voting for the Republican decreased by about $15 \%$ for both men and women in 2016.

When gender and support for gay marriage are controlled for, the gap between men and women's likelihood of supporting the Republican candidate is about 6\% in 2012 and 2016. While the gap remained about the same, men's and women's likelihood actually increased by about $7 \%$ in 2016.

## C. Issues of Government Intervention

In the past, the gender gap has been explained by women's opinions on the role of government. Women are usually more in favor of social welfare programs and other forms of government intervention than men. However, women are typically less supportive of military intervention than men.

When gender and support for increased environmental protection are controlled, a gap still exists. In 2012, the gap between the likelihood of men and women supporting the Republican was nearly $9 \%$. However, in 2016, the gap shrunk to around $1.5 \%$. Women's likelihood had increased, while men's likelihood had decreased.

Repealing the Affordable Care Act has been a goal of Republicans since it was put in place. When gender and support for repealing the ACA are controlled, the gap between men's and women's probability of voting for the Republican was $4 \%$ in 2012 and increased to almost $9 \%$ in 2016. Both men's and women's probability decreased; women's decreased at a faster rate.

When controlling for gender and support for raising the minimum wage, there is a gap of about $5 \%$ between men's and women's probability of voting for the Republican. The gap remained virtually the same in 2008 and 2016, but men's and women's probability decreased almost $22 \%$ in 2016.

When gender and support for military intervention are controlled, there is a gap between men's and women's probability of voting for the Republican, but it varies
widely across the three elections. In 2008, the gap is minor at just under $2 \%$, but men's and women's probabilities diverge in 2012, increasing the gap to about 9\%. In 2016, men's and women's probabilities decline and the gap shrinks to about $6 \%$.

## VI. Conclusions

Based on the analysis that was conducted, a few conclusions can be made. The first is that the gender gap in 2016 was larger than it had been in the past. In a simple breakdown by gender from the New York Times, the gap increased by 3 and 6 points for both candidates over 2012 and 2008 respectively. When different demographic factors were isolated, the gender gap remained relatively the same in some, but did increase within in other demographics. The gap between black men and women, Hispanic men and women, and college-educated men and women all increased in 2016. For Hispanic men and women, and college educated men and women, the increase in the gap was due to men's probability of voting for the Republican increasing and women's decreasing. For black men and women, both probabilities were increasing, but men's probability increased at a faster rate.

In 2016, gender also worked differently in other ways, especially when considered with other demographic factors. For the first time in 2016, being a Hispanic woman had a significant impact on vote choice. Previously, in 2008 and 2012, being a woman or being Hispanic were significant separately, but as a combined variable had no added impact. There was a similar effect for Democratic women in 2016 as well. In 2008 and 2012, being a woman and being a Democrat both had a significant effect on vote choice. Then in 2016, there was a significant interaction between being a woman and a Democrat, which had an impact on vote choice. These changes from insignificant to significant could be attributed to in-group loyalty. Although, in-group loyalty amongst women is weaker than others, Hispanics are more likely to vote for Democrats, as are those who identify as Democrats. The tendency of women to vote for Democrats combined with being Hispanic or a Democrat could have been amplified by the Democratic candidate being a woman. As a result, the interaction between being both a woman and Hispanic or a Democrat became significant for the first time in 2016.

Throughout the 2016 campaign, the effect education would have on voting was discussed often. As was noted, the gap between college-educated men and women did increase in this election. However, although the gap for postgraduate-educated and high school-educated men and women decreased, these two categories still provide interesting insights. Based upon these two groups there also appears to be a larger education gap in 2016 as was speculated by many political commentators at the time of the election. High school-educated men and women's support for the Republican candidate increased significantly, while postgraduate-educated men and women's support decreased significantly. As a result, it appears that education levels are also creating polarization in vote choice.

The apparent polarizing effect of education level may be the result of differing worldviews. For example, climate change is an issue that has become increasingly
partisan over time. People with postgraduate educations may be more willingly to accept the science of climate change than other groups. Whereas, those who only completed high school levels of education may be more skeptical and more likely to view climate science as a debatable topic than fact. The increased partisanship surrounding this and similar issues could also have influenced the divergence between education levels. People who identify more strongly with a certain political party often shape their own views on issues partially based on the perspective of the party. In general, people who hold postgraduate degrees are more likely to identify as Democrats, while those with high school educations are more likely to identify as Republicans. Thus, this phenomenon could explain the divergence between people with high and low levels of education.

Among men and women who hold similar policy positions, there was no significant increase in the gender gap. In fact, in the case of men and women who support environmental protection, the gap actually decreased. Overall, the changes in support of the Republican from year to year seem to fit ideologically. For example, men and women who support increased border patrols had an increased likelihood of voting for the Republican in 2016 and those who support increasing the minimum wage had a decreased likelihood. However, there were some anomalous results, as well. For one, men and women in support of gay marriage had a significantly higher likelihood of voting for the Republican in 2016 than they did in 2012.

Finally, when the gender gap is tracked over the course of the 2016 campaign it was much more volatile than it had been during past campaigns. Throughout the 2016 campaign, the gap was anywhere between 2 and 21 points. In 2012 and 2008, the gender gap only fluctuated between 4 and 16 points at any given time. The 2016 campaign was truly unusual and it was reflected in the way the gender gap presented itself.

This research proved the hypothesis that the gender gap was greater in 2016 to be correct. The misogynistic, racist, and otherwise inflammatory rhetoric of Donald Trump did seem to impact the gender gap and may have also influenced some demographics overall. Individuals with high-incomes, and those with a postgraduate education became much less likely to vote for the Republican candidate in 2016 than they had been in 2012. While there is no way to determine exactly what caused these sizeable shifts, it can be speculated that the unusual nature of the 2016 campaign had a significant impact. This research shows that the gender gap in 2016 was larger than in the past two elections. However, it also indicates that the gap in 2012 was greater than it was in 2008. Could the larger gender gap in 2016 simply have been the result of increasing partisanship between men and women? Can the gender gap be expected to increase with each subsequent election regardless of the political discourse of the campaign? The answers to these questions would require further study in the coming elections.

## References

Cantor, R. D. (1975). Voting behavior \& presidential elections. Itasca, II: F. E. Peacock Publisher. Carroll, S. J., \& Fox, R. L. (2010). Gender and elections: Shaping the future of American politics. New York: Cambridge University Press.

Cooperative Congressional Election Study. (2009). CCES, common content, 2008 Harvard Dataverse.

Cooperative Congressional Election Study. (2013). CCES, common content, 2012

Cooperative Congressional Election Study. (2017). CCES, common content, 2016

Deckman, M., \& McTague, J. (2014). "Did the 'war on women' work? Women, men, and the birth control mandate in the 2012 presidential election". American Politics Research, 43(1), 3.

Ducat, S. (2004). The wimp factor: Gender gaps, holy wars, and the politics of anxious masculinity. Boston: Beacon.

Huddy, L., \& Carey, T. E. (2009). "Group politics redux: Race and gender in the 2008 democratic presidential primaries." Politics \& Gender, 5(01), 81.

Kaufmann, K. M., \& Petrocik, J. R. (1999). "The changing politics of American men: Understanding the sources of the gender gap." American Journal of Political Science, 43(3), 864.

Lewis-Beck, M. S., Jacoby, W. G., Norpoth, H., \& Weisburg, H. F. (2008). The American voter revisited. Ann Arbor: University of Michigan.

Nagler, J., \& Leighley, J. E. (2012). Who votes now? Demographics, issues, inequality, and turnout in the United States Princeton University Press.

Quinnipiac University Poll. Clinton tops 50 percent, leads Trump by 10 points, Quinnipiac university national poll finds; voters like Clinton more than Trump - but not much

Quinnipiac University Poll. (February 21, 2007). Giuliani tops Clinton in 2008 presidential race, Quinnipiac university national poll finds; republican runs strong in red, blue and purple states

Quinnipiac University Poll. (May 3, 2007). Obama runs best against GOP front-runner Giuliani Quinnipiac university national poll finds; Clinton still leads Dem primary race

Quinnipiac University Poll. (June 13, 2007). Top Dems catch Giuliani in '08 presidential race, Quinnipiac university national poll finds; Thompson ties McCain among republicans

Quinnipiac University Poll. (August 15, 2007). Clinton edges ahead of Giuliani for first time, Quinnipiac university national poll finds; but she still has biggest negatives of any candidate

Quinnipiac University Poll. (October 31, 2007). Treat for Giuliani as he inches ahead of Clinton, Quinnipiac university national poll finds; trick for Clinton as she drops overall

Quinnipiac University Poll. (May 14, 2008). Obama, Clinton both top McCain in November face-off, Quinnipiac university national poll finds; most democrats back Obama-Clinton 'dream ticket'

Quinnipiac University Poll (July 15, 2008). Women, blacks give Obama 9 point lead over McCain, Quinnipiac university national poll finds; men are split and whites tip to republican.

Quinnipiac University Poll. (August 19, 2008). McCain, seen 2-1 as better against Russia, gains on Obama, Quinnipiac university national poll finds; men and white voters go republican

Quinnipiac University Poll (September 18, 2008). Women, blacks give Obama 4-pt. lead over McCain, Quinnipiac university national poll finds; more voters say Dem tax plan helps middle class, poor

Quinnipiac University Poll. (June 8, 2011). Romney leads GOP pack, runs best against Obama, Quinnipiac university national poll finds; Mormons near bottom of voter comfort scale

Quinnipiac University Poll. (July 13, 2011). Bachmann surging in 2012 GOP race as Romney is flat, Quinnipiac university national poll finds; Obama tops all leading republican challengers

Quinnipiac University Poll. (August 31, 2011). Perry jumps to the top of GOP pack, Quinnipiac university national poll finds; Perry, Romney each run neck and neck with Obama

Quinnipiac University Poll. (October 5, 2011). With Christie out, Romney is back on top of GOP pack, Quinnipiac university national poll finds; Perry fades as Cain surges

Quinnipiac University Poll. (November 2, 2011). American voters like Obama better this week, Quinnipiac university national poll finds; Cain and generic up as Romney stalls and Perry fades

Quinnipiac University Poll. (November 22, 2011). Gingrich on top of GOP pack as Cain fades, Quinnipiac university national poll finds; Romney ties Obama in one-on-one matchup

Quinnipiac University Poll. (February 22, 2012). Santorum up 9 points among republican voters, Quinnipiac university national poll finds; Obama edges Santorum, but Romney is too close to call

Quinnipiac University Poll. (April 19, 2012). Big lead with women gives Obama an edge on Romney, Quinnipiac university national poll finds; Christie, Rubio, Ryan top GOP running mate list

Quinnipiac University Poll. (July 11, 2012). Big marriage gap keeps Obama ahead by a nose, Quinnipiac university national poll finds; American voters give Supreme Court best scores in DC

Quinnipiac University Poll. (October 2, 2012). Women give Obama an edge over Romney, Quinnipiac university poll finds likely voters pick president to win debate 2-1

Quinnipiac University Poll. (May 28, 2015). Five leaders in 2016 republican white house race, Quinnipiac university national poll finds; Rubio, Paul are only republicans even close to Clinton

Quinnipiac University Poll. (July 30, 2015). Trump tops republican pack by wide margin, Quinnipiac university national poll finds; but Dems trump Trump in general election

Quinnipiac University Poll. (August 27, 2015). Biden runs better than Clinton against top republicans, Quinnipiac university national poll finds; Trump GOP lead grows as Clinton Dem lead shrinks.

Quinnipiac University Poll. (September 24, 2015). Biden, Carson are strongest in general election, Quinnipiac university national poll finds; Fiorina thumps Trump in debate; ties Clinton in matchup

Quinnipiac University Poll. (November 4, 2015). The doctor is in as Carson ties Trump in GOP race, Quinnipiac university national poll finds; Carson tops Clinton by 10 points in general election

Quinnipiac University Poll. (December 2, 2015). Bump for Trump as Carson fades in republican race, Quinnipiac university national poll finds; Clinton, sanders surge in matchups with GOP leaders

Quinnipiac University Poll. (February 5, 2016). U.S. republicans want Trump, but Rubio is best in November, Quinnipiac university national poll finds; Dem race is tied, but sanders runs better against GOP

Quinnipiac University Poll. (February 18, 2016). American voters feel the Bern in November matchups, Quinnipiac university national poll finds; spoiler alert Bloomberg hurts sanders more

Quinnipiac University Poll. (March 23, 2016). Kasich, sanders trail in primaries, lead in November, Quinnipiac University national poll finds; voters blame Trump and protesters for violence

Quinnipiac University Poll (June 1, 2016). Battle of the sexes leaves Clinton with edge over Trump, Quinnipiac university national poll finds; she leads on brains, morals, but he's up on leadership.

Quinnipiac University Poll. (June 29, 2016). Hate winning, as Clinton-Trump race too close to call, Quinnipiac university national poll finds; neither candidate would be good president, voters say

Quinnipiac University Poll. (September 14, 2016). Trump cuts Clinton lead in half, Quinnipiac university national poll finds, most Americans are voting against, not for, A candidate

Quinnipiac University Poll. (September 26, 2016). Clinton 44 - Trump 43, too close to call, Quinnipiac university national poll finds; democrat has 9-point lead on tonight's debate

Quinnipiac University Poll. (October 7, 2016). Women, non-whites give Clinton 5-point lead over Trump, Quinnipiac university national poll finds; independent voters in big shift to Clinton

Quinnipiac University Poll. (October 19, 2016). Clinton tops Trump by 7 points, Quinnipiac university national poll finds; most voters say media is biased against Trump

Simon, S., \& Hoyt, C. L. (2008). "Exploring the gender gap in support for a woman for president." Analyses of Social Issues and Public Policy, 8(1), 157.

# Agenda Setting: The Barriers to Preventative Healthcare Issue Attention in the United States Congress 

By Jenny Corso*


#### Abstract

My study examines the political and institutional barriers to preventative medicine in the United States Congress. It specifically analyzes the factors that influence congressional agenda setting and issue attention, including a previously understudied factor: social context. I devised a multi-level, hierarchical model that uses negative binomial regression analysis. Consistent with other studies of agenda setting, the model measures the influence of a handful of independent variables - NYT Mentions, President, Public Opinion, Fitness Centers, Fruit and Vegetable Availability - on Policymaker Attention to preventative medicine between the years 1995 and 2015. My dependent variable (Policymaker Attention), measures the number of references to "prevention" or "preventative medicine" recorded in The Congressional Record. The central finding of my study is that social context matters a great deal. The number of fitness centers was the greatest predictor of policymaker attention, highlighting the influence of cultural factors on issue attention.


Keywords: Agenda setting; heath care; health care policy; prevention; preventative medicine; United States Congress.

## I. Introduction

Healthcare spending in the United States has been a heavily debated topic for decades. Per capita healthcare spending in the United States is nearly twice the average of other industrialized nations. In fact, according to the U.S. Centers for Medicare and Medicaid Services, U.S. healthcare spending has grown in recent years. In 2015, healthcare spending reached $\$ 3.2$ trillion (roughly $\$ 9,990$ per person). Accordingly, healthcare spending accounted for 17.8 percent of Gross Domestic Product in 2015 ("National Health Expenditure Data," 2016).

But despite spending so much on health care, the U.S. ranks $27^{\text {th }}$ out of 36 such nations in terms of life expectancy (OEDC Better Life Index, 2014). This figure suggest that the U.S. healthcare system is not utilizing its resources efficiently. Unlike many other industrialized democracies, the U.S. healthcare system comprises both private and public elements. Specifically, $37.1 \%$ is the rate of U.S. government health insur-

[^3]ance coverage, while $67.2 \%$ is the rate of private insurance coverage, resulting in a total population insurance coverage of $90.9 \%^{1}$ (Barnett \& Vornovitsky, 2016).

This virtual mosaic of coverage presents distinctive challenges in terms of finding the most efficient spending allocation strategy. Specifically, policymakers have long debated the value of investing in preventative versus curative medicine. Whereas curative measures address existing ailments via inpatient or outpatient treatment (e.g., pharmaceutical drugs, surgery, physical therapy), preventative medicine strives to empower individuals to make healthier lifestyle choices and to screen for-and ultimately identify-potential problems before they blossom into a debilitating condition. Put differently, preventative medicine aims to mitigate patient reliance on curative medicine. The spending pendulum has historically swung toward curative, not preventative, medicine ("National Health Expenditure Data," 2016). In fact, Faust (2005) shows spending on medical treatment outpaces spending on preventative medicine by a ratio of 1:99 cents.

In recent years, however, public health experts have begun to question whether the American medicine's overreliance on curative medicine is the most efficient way to utilize resources. The American Public Health Association (APHA) concluded that a 10 percent increase in funding for community-based prevention programs could reduce deaths due to preventable disease by 1 to 7 percent (APHA, 2014). A 2009 study by the Trust for America's Health examined the annual savings and return on investment (ROI) that would result from per capita investments in prevention programs. This study shows that an investment of $\$ 10$ per person, per year in community-based disease prevention programs could yield net savings of over $\$ 2.8$ billion annually in health care costs in one to two years, over $\$ 16$ billion annually within five years, and nearly $\$ 18$ billion annually in 10 to 20 years (in 2004 dollars). This level of investment yields an ROI of 0.96 in the first one to two years, meaning that the country could recoup almost $\$ 1$ over and above the cost of the program for every $\$ 1$ invested. The ROI could rise to 5.6 for every $\$ 1$ invested within 5 years and rise to 6.2 within 10 to 20 years. Equally important, this ROI only accounts for medical cost savings. It does not take into account the multitude of economic and social gains that would result from increased worker productivity, reduced absenteeism at work and school, and enhanced quality of life ("Prevention for a Healthier America," 2009).

Preventative medicine is especially well-suited for treating chronic diseases, like heart disease, stroke, cancer, type 2 diabetes, obesity, and arthritis, which, according to the Centers for Disease Control and Prevention are "the most common, costly, and preventable of all health problems" ("Chronic Disease," 2016). As of 2012, approximately half of all U.S. adults had one or more chronic health conditions. Seven of the top-10 causes of death in 2010 were chronic diseases, while two of these chronic diseases, heart disease and cancer, accounted for about $48 \%$ of all deaths.

[^4]Risk behaviors, or unhealthy habits, cause much of the suffering, illness, and death related to chronic disease. Lack of exercise, poor nutrition, tobacco usage, and excessive drinking are among the most common health risk behaviors ("Chronic Disease," 2016). Over half of adults over the age of 18 did not meet recommendations for physical activity. Ninety percent of Americans consume too much sodium, increasing their risk of high blood pressure. After analyzing these troubling statistics, it is not surprising that eighty-six percent of all healthcare spending in 2010 was for people with one or more chronic medical conditions. In sum, many of these chronic conditions can be virtually eliminated through relatively low-cost lifestyle changes ("Chronic Disease," 2016).

The Affordable Care Act took an important first step towards implementing preventative healthcare spending. The ACA established the Prevention and Public Health Fund (the "Fund" hereafter), which must be used "to provide for expanded and sustained national investment in prevention and public health programs to improve health and help restrain the rate of growth in private and public health care costs" (Patient Protection and Affordable Care Act of 2010). Much of 2015's healthcare spending growth can be attributed to the coverage expansion that began in 2014 because of the ACA.

However, since the faster growth in total healthcare spending was primarily due to increased spending for private health insurance, hospital care, physician and clinical services, Medicaid, and retail drug prescription, the effectiveness of the act in improving America's largest health issue of widespread chronic disease is questionable. Indeed, the Fund has the promising goal of funding "programs at the local, state and federal levels that fight obesity, curb tobacco use, and increase access to preventative care services," but its impact has been hindered by budget cuts ("Prevention and Public Health Fund," 2001). The ASA originally allocated $\$ 2$ billion to the Fund in 2010. Significant budget cuts of $\$ 1$ billion in 2012 and $\$ 68$ million in 2016 left only $\$ 932$ million to fund preventative public health activities in 2016. Cutting the Fund's budget by more than half of the amount originally allocated shows that preventative programs are clearly not a priority of Congress. In fact, only about 3 percent of U.S. health care spending focuses on prevention and public health.

It is against this backdrop that this study examines the political and institutional barriers to preventative medicine. My paper specifically analyzes the factors that influence agenda setting and issue attention in the U.S. Congress. Agenda setting refers to the process through which policymakers select some issues, but not others, for consideration within a decision making body (Kingdon, 2003). Previous research indicates that preventative measures are more desirable than curative measures for a number of reasons. From a physical and social perspective, it is better to stop diseases before they begin than endure suffering. From an economic perspective, investing in preventative initiatives would result in monumental cost savings, significantly increasing public welfare. Why, then, do policymakers fail to recognize these benefits and continue to devise health care laws aimed at maintaining a curative based system?

Policy scholars suggest that a number of factors influences agenda setting, including the nature of the problem itself, media attention, public opinion, political ideology and others (Kingdon, 2003). My research, however, assess these institutional and political variables alongside a new and noticeably understudied factor: social context. I am specifically interested in examining the relationship between the country's recent "fitness revolution" and health care policy, particularly in the area of preventative medicine. Many Americans are beginning to incorporate healthy habits into their everyday lives. More and more people are choosing heathy fast food options, like Panera, Sweetgreen, and Chipotle, over low-nutrition options, like McDonald's or Burger King. Group fitness classes, like CrossFit, Soul Cycle, and Zumba, are not only gaining popularity, but also becoming a social phenomenon. Americans are beginning to see the quality of life benefits that preventative medicine provides, yet public policy continues to lag behind in this revolution (Faust, 2005; OEDC Better Life Index, 2014).

This paper thus asks: To what extent have these larger social changes resulted in increased policymaker attention to preventative medicine? In doing so, my aim is to advance scholarly understandings of the barriers to proactive policy. Additionally, the results of my research could inform the formulation of a strategy to bring preventative health initiatives to the forefront of Congress's attention, allowing the United States to capitalize on the immense cost savings and quality of life improvements that these policies offer.

## II. Literature Review

Agenda Setting

Agenda setting describes the process through which issue are selected for consideration by a decision-making body, be it a legislature, executive branch agency, or even a court. Because government institutions are limited in terms of the amount of time they can devote to any particular issue, agenda setting is considered an important, but not necessarily a sufficient, precursor to policy change (Birkland, 2011).

A number of factors influence whether or not an issue cracks the policy agenda. First, the various types of problems that the government is expected to address are each marked by distinctive features, which often correspond to different agenda setting processes. For example, whereas some problems reveal themselves slowly and across time through a gradual accumulation of statistics, numbers, and other forms of government "indicators," other problems reveal themselves rapidly through a focal event, which refers to large-scale, and often unexpected, disasters (Kingdon, 2003).

Domains prone to disaster, like earthquakes and hurricanes, "are most sensitive to policy change in the wake of disaster" (Birkland, 2006, p. 7). Attention to these domains is immediate but often short-lived, as individuals afford them attention only in the small window of time immediately following the disaster. Unlike a focal event, indicators by themselves do not induce immediate upticks in attention. Instead, interest
groups and government agencies must interpret and publicize these numbers in order to advocate for their policy goals. Problems characterized by indicators, such as the economic state or healthcare structure, tend to linger on the agenda, but are subject to resistance from opposing parties or interest groups (Kingdon, 2003).

The media is the main means by which slower-emerging indicators gain recognition. Research on agenda setting includes hundreds of studies on the news media's influence on attention to policy issues (e.g., Iyengar \& Kinder, 1987; Krosnick \& Kinder, 1990; Nelson \& Oxley, 1999; Arceneaux, Johnson, Lindstädt \& Wielen, 2016). Studies find consistent support for media influence on issue salience, a key trait to cracking the policy agenda. The amount of news coverage of an issue allows individuals to interpret its importance through comparison with salience cues of other issues. The theory at the core of the effect of salience on attention is "media priming," or the ability of the media to influence one's thoughts, beliefs, judgments, and behaviors (Berkowitz, 1984).

Several characteristics of the media, including its ubiquitous nature and range of topics, make it a powerful source of priming. News media priming has significant implications in the agenda-setting realm because it influences what people "think" about. Put differently, it helps set the systemic agenda, which comprises the various issues the public is currently concerned with (Birkland, 2011). For instance, McCombs and Shaw (1972) found a strong correlation between the dominant news stories leading up to the 1968 presidential election and the public's judgements of what the important issues were at the time.

Studies that are more recent have examined "dosage hypothesis," which is derived from news media priming theory and asserts that changes in the amount of media coverage of a particular issue changes the weight that citizens place on the issue. In a specific application of agenda setting analysis, Malhotra and Krosnick (2007) recorded the variance in volume of media coverage of the economy, Iraq war, and terrorism leading up to the 2004 presidential election. Their methodology comprised a survey asking respondents to rank the importance of each issue. Contrary to prior research, the results did not find consistent support for dosage hypothesis. Malhotra and Krosnick suggest that media priming only takes place when huge shifts in media volume coverage occur. The economy, Iraq war, and terrorism are all issues that the media had covered extensively over a long period, so there was not a large shift in media volume coverage of the topics at the time of the election. Thus, issues characterized by focal events rather than indicators may be better candidates for dosage hypothesis.

The link between the amount of media coverage and the perceived importance of an issue raises important questions about the sources of the media agenda. In particular, research about who sets the media agenda provides insight about the early stages of the communication process. For example, Wanta, Stephenson, Turk, and McCombs (1989) studied the president-press relationship by comparing the president's emphasis on issues during speeches to subsequent news coverage. Analysis of both President Franklin Roosevelt's and President Reagan's State of the Union addresses showed that the topics mentioned in the speeches influenced newspaper coverage. Weaver and El-
liott (1985) found similar results in their study of city council meetings and subsequent news coverage of the issues discussed. According to these two studies, public officials have the ability to influence significantly media agenda setting, which determines issue salience to the public. Since increased issue salience correlates with congressional attention, politicians could leverage this early-stage media communication to influence the media agenda, and then potentially crack the congressional agenda with a particular topic of interest.

Public salience is particularly important in a democratic nation because salience influences constituents' thoughts and preferences. Under a democratic political structure, constituents are the driving force behind political leadership, and thus, congressional agenda setting. Voting is the most common form of political participation among the public, and many view election results as indirect guidance in pursuing a particular policy. In some cases, like state initiatives or referenda, constituents even directly influence policy structure by voting on the policy proposal itself (Birkland, 2011). In his book The Myth of the Rational Voter, Bryan Caplan explains, "people vote for the politician whose position is closer to their own" (Caplan, 2007, p. 144). Then, theoretically, the politician will implement the promised policy once elected. This concept incentivizes politicians to match the electorate's preferences, which gives rise to the issue of voter rationality (Caplan, 2007).

From a series of experiments, Caplan concluded that irrational voter beliefs lead to inefficient policies. Many of these irrational beliefs stem from voter self-interest. For example, in regards to "smokers' rights," $61.5 \%$ of heavy smokers want looser antismoking policies, but only $13.9 \%$ of people who have never smoked agree (Caplan, 2007, p. 150). Considering the vast collection of scientific evidence highlighting the dangers of smoking, it is irrational that voters would support laxer smoking restrictions, especially when "social contract" is the foundation of a soundly functioning democracy (Rousseau, 1762). Caplan's theories and research point to the notion that most voters are irrational, which leads to inefficient policies, and ultimately, decreased social welfare (Caplan, 2007).

However, subsequent studies have shown that voters are not fundamentally irrational, but they may appear to be so due to lack of necessary information. Research on "blame attribution" after government failure sheds light on voters' ability to make informed judgments. Malhotra and Kuo (2008) conducted a study to determine how citizens apportion blame to public officials in the wake of government failure. They formulated a survey experiment that asked respondents to rank seven public officials in order of how much they should be blamed for the damage that resulted from Hurricane Katrina. Through the survey, the researchers tested the effects of two forms of information about public officials on blame attribution - political party affiliation and job titles, as well as their interaction. Malhotra and Kuo found that "party cues cause individuals to blame officials of the opposite party, but citizens make more principled judgments when provided with information about officials' responsibilities" (Malhotra \& Kuo, 2008, p. 120). In other words, party cues serve has heuristics, but access to additional
relevant information mitigates these heuristics. Results from this study provide support for citizens' ability to use given information to make rational decisions. Further, Malhotra and Kuo observed that the study's results were consistent across those respondents with a high school diploma or less and those with education beyond high school. According to this study, citizens generally have the capacity to make unbiased blame attributions and do their best with the information they have (Malhotra \& Kuo, 2009).

Once elected, the party in power largely controls the agenda setting process. Logically, the party that enjoys a majority presence in governmental positions often determines whether an issue reaches the crowded government agenda. Numerous studies have demonstrated that partisan polarization is somewhat prevalent at the voter level, but it is most dominant within Congress and the House of Representatives (SEE: Malhotra and Kuo, 2009; Harbridge, 2015; Baumgartner and Jones, 2015). It is fairly well established that conservatives and liberals differ in terms of their policy priorities. The United States is currently experiencing a decline in bipartisanship; public officials fall into two distinct categories with little agreement between the two parties.

In sum, polarization damages effective democratic governance by causing gridlock, hindering policy innovation, and diminishing responsiveness (Harbridge, 2015). Drawing upon her analysis of Congressional roll call votes over time, Harbridge (2015) asserts that the agenda for roll call votes in Congress changing with the degree of bipartisan voting provides evidence for strategic partisan agenda setting. Consequently, "less bipartisan agendas result in less bipartisan policy outputs and a lower rate of converting bills that pass the House into public law" (Harbridge, 2015, p. 82). For example, policies involving healthcare system improvement historically have been a liberal party priority, so if conservatives hold the majority power, it is unlikely that these policies will receive attention, despite their many numerically and scientifically proven benefits. According to the National Democratic Institute, "a capable and effective national legislature is a foundational pillar of democratic government"; the ability of representatives to communicate with citizens and shape laws that are in constituents' best interest is essential for effective national legislature (National Democratic Issue 2013). Polarization holds policymakers back from meeting these requirements and achieving optimal public welfare.

## Myopic Voting in Legislative Settings

A growing body of literature has examined the challenges to placing so-called "anticipatory problems" on the legislative agenda (DeLeo, 2015). Anticipatory problems are predicted to occur at some point in the future, but the exact time of occurrence, or even whether or not the event will occur, is unknown. The uncertain nature of anticipatory problems generates debate as to the amount of resources that should be invested prior to actual occurrence of the possible event (DeLeo, 2015). This literature has focused primarily on disaster domains, a testament to the fact that disaster policy (much like health care policy) tends to emphasize reactive interventions-often times at the
expense of robust planning and preparedness measures (Birkland, 2006). A number of seminal works suggest this division is an outgrowth of retrospective voting, or voting based off of past performance (Healy \& Malhotra, 2009; Malhotra \& Marglit, 2014; Malhotra \& Krosnick, 2007). Factors that affect retrospective voting behavior include expectations set by politicians, the outcomes of those expectations, the time horizon of events, salience, and observability.

First, expectations that public officials set in advance has shown to be a significant factor in the extent of retrospective voting behavior. Malhotra and Marglit (2014) developed a theoretical framework of how expectation setting affects voters' retrospective evaluations of incumbent performance. These expectation set by the public official and the outcome together determined the respondents' assessment of the leader's judgment, as well as whether the respondent would vote to reelect the official. Malhotra and Marglit (2014) showed that in domains where politicians have practical authority, or direct influence, the politician is punished with decreased political support for setting high expectations if the expected results are not attained. In domains where politicians have theoretical authority, or limited influence, the same concept holds true, except that the expectation setting sends a signal about the politician's judgment. In domains where politicians have neither practical nor theoretical authority, setting high expectations is beneficial, as there is no penalty for poor outcomes. Malhotra and Krosnick (2007) found further support for expectation setting as a determinant of voting behavior in their analysis of retrospective and prospective performance assessments during the 2004 election campaign. Specifically, Malhotra and Krosnick (2007) reaffirmed mediation hypothesis, that "domain-specific assessments of presidential job performance may not shape intended vote choice directly but may instead do so indirectly, by influencing overall job approval ratings and comparative prospective evaluations of the likely performance of the incumbent and the challenger" (Malhotra \& Krosnick, 2007, p. 250). Thus, Malhotra and Krosnick (2007) refines Malhotra and Marglit (2014) through showing that assessments of performance may have even greater implications in indirect measures than in direct voting.

A politician's personality disposition has proven to be an especially important factor in expectation setting and, in turn, retrospective voting behavior. Malhotra and Marglit (2014) found that "optimism is valued by voters as a personality disposition" (Malhotra \& Marglit, 2014, p. 1000). To achieve this level of optimism, policymakers often avoid problems that they cannot fix (Rochefort \& Cobb. 1994). Further, Malhotra and Margalit contend that if voters expect politicians to be optimistic, "it can disincentivize campaigns from dealing with hard issues that might require appearing pessimistic" (Malhotra \& Marglit, 2014, p. 1002). Because of their associated uncertainties, the issues that preventative policy can be applied to (i.e. terrorism, health care, natural disaster, climate change) comprise the bulk of the most daunting problems for policymakers. Since a preventative mindset requires some level of pessimism in terms of expecting disaster, voters may be reluctant to vote for candidates who support prevention. Oftentimes, policymakers are reluctant to invest in programs that might not
produce short-term benefits (Healy \& Malhotra, 2009). If a politician, however, does invests in programs that does not produce short terms benefits, the only basis on which voters can assess the politician is his or her personality disposition. For this reason, policymakers pursue ready-made solutions, which adds to their air of confidence and optimism (Kingdon, 2003).

The time horizon of particular issues contributes to the relative importance voters place on them. In terms of retrospective voting, Malhotra and Krosnick (2007) tested the mediational effects of Bush's performance regarding Iraq, the economy, and terrorism. They found that overall approval completely mediated the relation between Iraq approval and intended vote choice, and partially mediated the relation of economy approval and intended vote choice. However, terrorism approval did not have a significant effect on intended vote choice. Thus, the 2004 election outcome depended more on voter opinions about Iraq and the economy than on terrorism (Malhotra \& Krosnick, 2007, p. 263). Malhotra and Krosnick (2007), as well as DeLeo (2015), contend that the reason for this distinction relates to the timeline of the tangible effects of each topic. Iraq immediately and directly affects the lives of soldier and their families. The state of the economy does not have quite the degree of immediate impact that Iraq does, but it still affects citizens' employment status and spending behaviors. The outcomes of Bush's policies regarding Iraq and the economy are, comparatively, highly visible. Terrorism, on the other hand, is further removed from the realm of immediate observability, as most terrorism policy focuses on prevention. DeLeo (2015) adds that the passage of time improves policymakers' ability to manage low-probability, high-risk events, like terrorism. As time passes, more policy solutions for terrorism will become available. On the other hand, politicians immediately had to provide policy solutions for the Iraq war, making the Iraq war a more pressing issue in voters' minds. The timeline for terrorism policy is long spanning and rather ambiguous, while the timeline for Iraq war policy during the 2004 election was day-to-day and transactional.

Drawing upon both the literature on retrospection and the literature on the role of voters in the democratic political process, it is evident that preventative policy lacks incentive for agenda inclusion. Voters largely determine a policymaker's career success, so the policymaker will pursue policies that voters support over policies that voters do not support. Healy and Malhotra (2009) found that voters significantly reward disaster relief spending, but show no response at all to cost-effective preparedness spending. Healy and Malhotra further affirm that preparedness spending produces a large social benefit. They estimated that an investment of $\$ 1$ in disaster preparedness reduces all future damage by about $\$ 15$. Thus, voters are "myopic in the sense that they are unwilling to spend on natural disasters before the disasters have occurred," resulting in an immense loss in public welfare (Healy \& Malhotra, 2009, p. 402). Parallel to their attitudes towards the time horizon of issues, voters are transaction-minded in terms of monetary investment. Voter responsiveness suggests that preparedness spending has virtually no electoral utility, while "about $\$ 27,000$ in relief spending buys one additional vote" (Healy \& Malhotra, 2009, p. 400). The collectiveness mechanism sheds
light on the rationale behind voters' preference for relief spending. In general, voters prefer private goods to public goods. Private goods that voter receive from relief spending are targetable and highly salient. Voters support relief spending because relief typically comes in the form of direct, individual-level payments, while the government usually delivers preparedness in the form of public, collective goods (Green, 1992; Lizzeri \& Persico, 2001; Sears \& Citrin, 1985). Thus, relief spending is virtually a means of purchasing votes based on voter preferences.

From the present literature, it seems as though a hurdle for voter support of certain preparedness policy is public observability, or the ability to see the effects of a particular policy or initiative. Healy and Malhotra (2009) discuss that the government does not underinvest in every type of preparedness. They highlight that after the September 11 terrorist attacks, the government made large investments in airport security in order to prevent another attack. Healy and Malhotra believe that "one clear difference between airport security and most natural disaster preparedness spending is that airport security is highly observable and salient" (Healy \& Malhotra, 2009, p. 402). Any citizen who travels by plane directly experiences the effects of terrorism prevention policy through increased screening and carry-on restrictions. In addition, the government implemented the security increase immediately while news of the attacks was fresh in citizens' minds. In contrast, it is difficult to directly observe the impact of natural disaster preparedness (or preventative healthcare) because citizens are unable to experience how much worse the damage could have been had there been no preparedness initiatives in place. A natural disaster may not occur immediately after preparedness policy is enacted; in fact, a natural disaster may not occur for the next 20 or so years. If significant time passes between policy enactment and the occurrence of the disaster, the issue will no longer be salient is citizens' minds, making them less likely to reward the politicians originally involved in preparedness implementation.

Although it is clear that policymakers do not give preparedness adequate attention, largely due to myopic voting, many researchers caution against completely dismissing relief spending (Mays \& Smith, 2011; Healy \& Malhotra, 2009; DeLeo, 2015; Kunreuther, 2008; Sofgre, 2008). Healy and Malhotra (2009) and DeLeo (2015) contend that policymakers must find the optimal ratio of relief spending to preparedness spending to maximize efficiency. Many "anticipatory" problems (namely natural disasters, climate change, and healthcare) have both short-term and long-term implications. Healy and Malhotra (2009) explain that some negative effects of disasters are inevitable, so the government should provide some type of relief after a disaster occurs. At the same time, policymakers should pursue preparedness measures to mitigate destruction from future disasters. In analyzing the problem of climate change, DeLeo (2015) points out that climate change is "simultaneously a future problem and an immediate hazard" (DeLeo, 2015, p. 4). Like natural disasters and climate change, effective healthcare involves both the treatment of immediate illness or injury and the implementation of habits to increase healthful longevity. Therefore, an effective policy package requires a mix of short-term fixes and long-term mitigation. The problem,
though, is that voters incentivize politicians to provide the wrong ratio of preparedness to relief (Healy \& Malhotra, 2009).

Political scientists have long characterized policy makers as being reactive and myopic. Specifically, policymakers are more likely to support policies that address immediate problems rather than those that mitigate future harms. Virtually all of the empirical research on legislative myopia and anticipatory policymaking has focused on disaster policy making, despite the fact that preparedness is a hallmark of other areas of public policy, including emerging technologies, health care, and even social security. This omission has effectively stunted scholarly understanding of the drivers of proactive policy making -however rare it may be-in non-disaster situations. My study fills this void by examining the political and institutional barriers to preventative medicine in the United States Congress. Most notably, my study analyzes these barriers in light of social context, which is a factor absent from the existing literature.

## III. Methodology

As indicated above, the literatures on agenda setting and myopic voting provide an admirably clear depiction of the various factors that drive reactive voting in the U.S. Partisanship, the media, electoral outcomes, even the dimensions of the problem itself, have all been shown to induce a reactive policymaking sequence. However, missing from this analysis is any sort of explicit consideration of the way in which larger (and often non-political) social trends shape policy outcomes. Put differently, to what extent do changes in social norms shape policy outcomes? Kingdon (2003) and other studies of policy change suggest these types of exogenous factors can influence the policy process, but these scholars have yet to systematically examine their impact on the policy process, let alone their connection to reactive voting.

My study aims to fill this void. I essentially replicate the methodology used in other quantitative studies of the agenda setting process, although I add a series of independent variables that serve as proxies for social context. Broadly speaking, most studies of agenda setting and policy change measure the influence of a handful of independent variables (e.g., media attention, problem features, public opinion, etc.) on policy legislative attention (SEE: Birkland, 2006; Kingdon, 2003). Borrowing from this literature, my dependent variable (Policymaker Attention), measures the number of references to key words recorded in The Congressional Record between the years 1995 and 2015. The Congressional Record is a running record of all statements made on the floor of the U.S. Congress. The Congressional Record is thus widely used as a surrogate measure of agenda setting. Consistent with other studies of agenda setting, dependent variable data is measured at the quarter-year level. This approach corrects for lags in policy activity (DeLeo, 2018). The greater the number of references to an issue, the more likely it is that the issue has been granted space on the government agenda. I collected this data on January 8, 2018 from the U.S. Government Publishing Office website, which provides public access to a selection of federal government information.

My dependent variable consists of two levels of specificity. First, I filtered The Congressional Record for the words "health reform" or "healthcare" for the years 1995-2015. This search shows policymaker attention to the broad category of all health-related issues. Second, I filtered within those results for the words "prevention" or "preventative medicine." This more targeted search shows policymaker attention to health-related issues on preventative medicine specifically. This second layering of coding helps ensure that I am truly measuring attention to preventative medicine, as opposed to simply health care reform, a related but ultimately much broader topic.

My study includes five independent variables, three of which are consistent with previous models of agenda setting and two of which measure social context (in this case, the health and fitness revolution). The first previously studied variable, NYT Mentions, records the number articles published in the New York Times on the topic of preventative medicine between the years 1995 and 2015. The media is widely accepted as a means of message involvement or "the relationship between the individual and some form of communication" (Hollander, 2007, p. 379). In particular, political involvement is whether a political issue is important to oneself. Numerous studies show correlations between newspaper exposure and political involvement (e.g., Druckman, 2001; Johnson \& Kellstedt, 2014; Reichert \& Print, 2017), so I utilized New York Times articles as a proxy for political involvement regarding preventative healthcare. Using LexisNexus online database, I measured media coverage by filtering articles from the New York Times for the same key words as those of my dependent variable.

My second previously studied variable, President, uses partisan control of the presidency. Partisan control of the presidency serves as a predictor for the types of legislation that reaches the governmental agenda. This is especially true in the area of health care, which has historically seen a great deal of presidential involvement (Blumenthal, 2010).

My third and final previously studied variable, Public Opinion, measures public opinion on the topic of health care. Many public officials are accused of being "poll driven," as they look mainly to public opinion polling data to assess their political and policy options. Thus, public opinion polls are often a predictor of agenda setting (Birkland, 2011, p. 51). For data collection of public opinion on prevention, I utilized data from the Gallup Poll Series. The specific question I referenced is "What do you think is the most important problem facing this country today?" This question appears annually in the Gallup Poll Series. ${ }^{2}$ I used the percentage of respondents who answered "healthcare" as a proxy for the level of priority that citizens assign to the issue of healthcare.

My remaining two variables work to measure the social environment. One trend that is particularly relevant to my study of preventative health policy is the public's exercise habits, a key aspect of chronic disease prevention ("Chronic Disease," 2016).

[^5]Exercise habits also play into the concept of salience; individuals who incorporate preventative health measures into their daily lives may be more likely to recognize both their effectiveness and the need for greater incorporation of these measures in the healthcare system. Accordingly, my fourth variable, Fitness Centers, reports data for the number of fitness centers in operation as a proxy measure for the magnitude of the public's exercise habits. I used data from the 2015 U.S. Census, which includes the number of establishments in each industry according to the establishments' respective NAICS code. In the section entitled Geography Area Series: Country Business Patterns, I collected data for the number of establishments registered under NAICS code 71394 Fitness and Recreational Sports Centers. ${ }^{3}$

Another societal trend that is relevant to preventative health care is diet quality. According to the Centers for Disease Control and Prevention, the health risk behavior of poor nutrition "cause(s) much of the illness, suffering, and early death related to chronic diseases and conditions" ("Chronic Disease Overview," 2017). Thus, adequate fruit and vegetable consumption is a preventative healthcare measure. My final variable, Fruit and Vegetable, reports annual fruit and vegetable availability per capita. This data is from the ERS Food Availability (Per Capita) Data System (FADS) through the United States Department of Agriculture website. "Food availability estimates measure food supplies moving from production through marketing channels for domestic consumption. The food availability data series is a popular proxy for actual food consumption" at a national level ("Food Availability Documentation," 2018). Specifically, the data are commonly used to "assess changes in estimated food consumption relative to major nutrition or policy initiatives" ("Food Availability Documentation," 2018).

In order to test the relationship between social context and issue attention, I built a multi-level, hierarchical model that uses negative binomial regression analysis. Whereas my New York Times and Policymaker Attention data is granular and measured quarterly, all of the other data is reported yearly. Hierarchical modelling allows me to tease out the interactive effects between these various "levels" of data by nesting the quarter year data (Policymaker Attention and New York Times) within larger yearly trends in social context (Fitness Centers and Fruit and Vegetable), partisan control of the presidency, and public opinion. This approach provides a more comprehensive depiction of the ways in which these larger societal trends, which might take years to influence policymaker thinking about an issue, shape policy outcome. Note also that my dependent variable consists of count data, hence my decision to use negative binomial regression analysis. This is the approach that is consistent with other studies of agenda setting in public health domains (DeLeo, 2018).

[^6]
## IV. Results

Table 1 below provides a summary of the variable definitions, as well as summary statistics.

Table 1
Variable Definitions and Summary Statistics

| Variable | Definition | Obs. | Mean | Std. Dev. |
| :---: | :---: | :---: | :---: | :---: |
| Dependent Variable |  |  |  |  |
| Policymaker Attention | The number of mentions of "prevention" and "preventative medicine" recorded in The Congressional Record. | 84 | 27.68 | 18.17 |
| Independent Variables |  |  |  |  |
| NYT Mentions | The number articles published in the New York Times filtered for the key words "prevention" or "preventative medicine." | 84 | 2.90 | 2.18 |
| President | Dummy variable indicating the partisan control of the presidency through assigning numerical values of " 0 " (Democrat) or " 1 " (Republican). | 21 | - | - |
| Public Opinion | The percentage of respondents who answered "healthcare" to the annual Gallup Poll Series question, "What do you think is the most important problem facing this country today?" | 21 | 9.10 | 4.54 |
| Fitness Centers | The number of fitness centers in operation registered under NAICS code 71394 Fitness and Recreational Sports Centers, per the 2015 U.S. Census. | 21 | 26,577 | 6,549 |
| Fruit and Vegetable | Annual fruit and vegetable availability (in pounds) per capita, reported by the U.S. Department of Agriculture. | 21 | 676.05 | 31.11 |

Table 2 shows the results of four negative binomial regression models. The reported coefficient is the incident-rate ratio, the percentage increase in the outcome associated with a unit increase in the predictor. Model 1 regresses Congressional Record mentions on mentions of health care in the New York Times. Model 1 predicts that for every added mention in the New York Times, there is a $7 \%$ increase in the number of
mentions in the Congressional Record. The constant value (22.4) is the baseline number of mentions in the Congressional Record in a quarter in which there were no mentions in the New York Times. As predicted, New York Times coverage is an important predictor of Congressional Record activity.

Table 2
Negative Binomial Regression Analysis

| Independent Variables | Model 1 <br> Fixed-effects <br> NYT | Model 2 <br> Random-effects NYT | Model 3 <br> Random-effects <br> NYT \& Fitness <br> Centers | Model 4 Random-effects All Predictors |
| :---: | :---: | :---: | :---: | :---: |
| NYT Mentions | $\begin{aligned} & 1.07^{*} \\ & (0.04) \end{aligned}$ | $\begin{aligned} & 0.93 * * \\ & (0.03) \end{aligned}$ | $\begin{aligned} & 0.93 * * \\ & (0.02) \end{aligned}$ | $\begin{aligned} & 0.93 * * \\ & (0.02) \end{aligned}$ |
| Fitness Centers |  |  | $\begin{aligned} & 1.01 * * * \\ & (0.002) \end{aligned}$ | $\begin{aligned} & \hline 1.00 \\ & (0.002) \end{aligned}$ |
| Public Opinion |  |  |  | $\begin{aligned} & 1.50 \\ & (3.78) \end{aligned}$ |
| Fruit and Vegetable |  |  |  | $\begin{aligned} & 0.99 \\ & (0.005) \\ & \hline \end{aligned}$ |
| President |  |  |  | $\begin{aligned} & 1.49 \\ & (0.38) \end{aligned}$ |
| Constant | $\begin{aligned} & \hline 22.4^{* * *} \\ & (2.77) \end{aligned}$ | $\begin{aligned} & \hline 28.84^{* * *} \\ & (4.72) \end{aligned}$ | $\begin{aligned} & 29 * * * \\ & (3.70) \end{aligned}$ | $\begin{aligned} & 16.21^{*} \\ & (7.49) \end{aligned}$ |
| Log(alpha) | $\begin{aligned} & \hline-0.92 \\ & (0.17) \end{aligned}$ | $\begin{aligned} & \hline-2.31 * * * \\ & (0.29) \end{aligned}$ | $\begin{aligned} & \hline-2.32^{* * *} \\ & (0.28) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-2.32 * * * \\ & (0.28) \\ & \hline \end{aligned}$ |
| $\operatorname{Var}(\mathrm{uj})$ |  | $\begin{aligned} & 0.41^{* *} \\ & (0.15) \end{aligned}$ | $\begin{aligned} & \hline 0.20^{* *} \\ & (0.075) \end{aligned}$ | $\begin{aligned} & \hline 0.16^{*} \\ & (0.063) \end{aligned}$ |
| Chi-square | 4.08 | 6.64 | 22.64 | 28.32 |
| Log-likelihood | -350.2 | -330.8 | -323.7 | -321.9 |

Standard errors in parentheses
${ }^{*} p<0.05,{ }^{* *} p<0.01,{ }^{* * *} p<0.001$

Since Model 1 ignores any yearly trend in Congressional Record mentions, the subsequent models fit a random-effects negative binomial regression in which the intercept is allowed to vary by year. Model 2 adds back New York Times mentions as a predictor. Each mention in the New York Times now decreases the predicted number of mentions in the Congressional Record by approximately 7\%. This is a change in sign from the initial single level regression. This reversal is an example of Simpson's paradox, which denotes an inverse relationship between the predictor and outcome variance. This example of Simpson's paradox indicates that New York Times mentions and Congressional record mentions are related to a third variable, as revealed in Model 3.

[^7]Most importantly, Model 3 adds the number of Fitness Centers in the U.S. ${ }^{4}$. The coefficient on New York Times mentions remains virtually unchanged. The model predicts a $1 \%$ difference in the number of Congressional Record mentions between two years that differ by 100 in the number of fitness centers operating in the U.S. Accordingly, fitness centers show to be an integral predictor of congressional activity, suggesting that social trends do, in fact, play an important role in shaping policy outcomes. To my knowledge, this model represents the first time scholars of myopic voting and agenda setting have established a direct relationship between social trends-a variable that is rather exogenous to the policy process-and congressional activity.

Adding the Level 2 predictor of fitness centers decreases the variance of the random intercepts. That is, controlling for the number of fitness centers has the effect of making each year more similar to one another with respect to Congressional Record mentions. To compare Model 3 to Model 2, I employ a chi-square test using the difference in the log likelihood between two models. The change in log-likelihood (which measures the fit of the model to the data, with smaller values indicating a better fit) is statistically significant in comparison to Model 2 (chi-square $=18.96, \mathrm{p}<0.01$ ). Thus, Model 3 is preferred over Model 2.

Model 4 adds the remaining Level 2 predictors of Public Opinion, Fruit and Vegetable availability, and a dummy variable indicating the political party of the President. Vegetable consumption did not have as robust of an effect on the legislative agenda as fitness centers. Adding the Level 2 predictors does not change the estimation of the effect of New York Times mentions; however, the coefficient on the number of fitness centers is no longer significant. None of the level 2 predictors are as significant in this model. Further, a chi-square test comparing the model fit of this model to Model 3 is not statistically significant (chi-square $-3.84, \mathrm{p}>0.05$ ). Thus, for primary analysis, I select Model 3.

## V. Discussion and Findings

This study intended to advance the literature on myopic voting and anticipatory policymaking through examining preventative healthcare policy attention, a previously neglected domain in this literature. I utilized a multi-level regression model to test the influence of a collection of social and political factors on preventative healthcare agenda setting. Unlike existing studies, my study placed an emphasis on the importance of social context in the policy environment. Social trends proved an integral part of Congressional agenda setting. Accordingly, my study yielded three important findings.

First, social context matters a great deal. Policy scholars have acknowledged that social context matters, but few have systematically analyzed the effects of social trends (Kingdon, 2003). The Fitness Revolution may not seem political on its surface, but policymakers are not immune to these trends. Specifically, my model shows that the independent variable that is most closely related to congressional record mentions is
the number of fitness centers, which is directly proportional to the number of mentions of healthcare in the congressional record. For every increase or decrease of 100 fitness centers, there is a $1 \%$ change, in the same direction, in healthcare mentions. This finding provides important insight into the ingredients of voter behavior. Of all independent variables, the measure for the public's exercise habits represents the variable that requires the highest level of involvement by voters. Further, the fitness revolution represents a lifestyle change for a significant portion of voters. With lifestyle change comes shifting voter priorities, which policy makers are receptive to, as my results reveal.

Second, my study calls into question whether all policy is truly problem driven. According to existing literature, agenda setting occurs in response to negative events. My research suggests a different path. The positive trends of the number of fitness centers and fruit and vegetable availability are closely related to issue attention. In this case, the relationship between a problem and policymaking occurs in the inverse. Instead of trying to fix a problem, policymakers are capitalizing on positive momentum or social trends. This is not to say that everyone is on board with the Fitness Revolution, but the pattern is fundamentally different.

Third, this study suggests alternative strategies for overcoming myopic voting. My results call into question literature on myopia's top-down strategy for encouraging greater preparedness or prevention. Policy scholars tend to talk about prevention as top-down, whereas the healthcare domain suggests that bottom-up, or culture-altering, strategy works better. Thus, the key to addressing inefficient policymaking is filling the gap between reactive and preparedness policy. Preventative healthcare cannot come from government policy alone-the most effective way to implement such activities is to create a culture of prevention. Congress followed the lead of the growing fitness culture through bottom-up strategy. Aldrich (2012) describes similar findings on the relationship between social capital and resilience. This study depicts how social networks and connections are largely the drivers of successful recovery after disasters. My study suggests that communal activities not only serve as a cultural building block, but also as predictors of policymaker behavior.

## VI. Conclusions and Implications

My findings provide the frameworks for streamlining policymaking efforts. First, policymakers must assess social context. Second, policymakers should look to positive social trends for legislative guidance before devising solutions to problems. In other words, it is more effective to capitalize on existing positive momentum rather than to attempt to implement an entirely new approach to domain improvement. Voters are more receptive to riding a positive trend than to accepting a proposed problem solution that up-ends current social behavior. Third, policymakers should take a bottom-up, cultural-altering approach rather than a top-down approach. They should look to influence the underlying cultural norms and trends instead of simply adding a top layer of constraining laws.

This study suggests the possibility of new sub streams of research within agenda setting literature. However, there are three key areas for future research that my study does not address. Firstly, my study only examines the area of healthcare. Future research of other areas could answer the question of to what extent social context shapes other policymaking domains. For example, substance abuse policy has shaped social marketing restrictions for smoking and drinking. "Cigarette advertisements on television and radio were banned in 1970," and the nation has since seen a dramatic reduction in cigarette smoking behavior (Durbin, 2014). Due to this legislative success, many are calling for similar restrictions on electronic cigarette advertising (Durbin, 2014). Further supporting this social context-focused policymaking strategy, alcohol advertising restrictions have proven to reduce the prevalence of hazardous drinking (Bosque-Prous et al., 2014). Domestic violence policy is another example of an area that may have implications in social changes as a means of policymaking strategy. The Jeanne Geiger Crisis Center has developed a nationally recognized framework of individualized intervention plans focused on "increasing victim safety and offender accountability" ("Jeanne Geiger," 2018). Such culture-altering programs may be successful in the form of national policy in the domestic violence policy domain. In these three domains, policymakers seem to aim to alter societal trends through changing the very root of the problem - the culture that emulates it. Future research can seek to confirm these notions through systematic analysis similar to my model.

Secondly, my analysis does not consider the dynamics of policy change-it only looks at issue attention and agenda setting. The vast majority of the issues that are included in the Congressional agenda never pass through the legislation phase (Kingdon, 2003). Future studies could examine preventative healthcare in the later stages of the policymaking process. Thirdly, it will be interesting to see if the effects of the fitness revolution wane across time, or if congressional interest dies with citizen interest. Currently, the fitness revolution is a novel trend in the social, economic, and political spaces. Once these fitness habits and lifestyles become commonplace, they may influence congressional attention to a lesser extent.

## References

Aldrich, D. P. (2012). Building resilience: Social capital in post-disaster recovery.Chicago, IL: University of Chicago Press.

American Public Health Association (APHA). (2014). Prevention and public health fund. Retrieved from http://www. apha.org/advocacy/Health+Reform/ PH + Fund/default.htm? NRMODE $=\mathrm{Pu}$ blished\&NRNODEGUID=\%7bD71F 6AD2-E25B-460E-AFC0-2984BF74 $1331 \% 7 \mathrm{~d} \& N R O R I G I N A L U R L=\% 2$ fadvocacy\%2fHealth\%2bReform\%2f PH\%2bFund\%2f\&NRCACHEHINT=NoModifyGuest\&PF=true (accessed December 31, 2015).

Appleby, J., \& Silke Carty, S. (2005, June 24). "Ailing GM looks to scale back generous health benefits." USA Today.

Arceneaux, K., Johnson, M., Lindstädt, R., \& Wielen, R. J. (2016). "The influence of news media on political elites: Investigating strategic responsiveness in congress." American Journal of Political Science, 60(1), 5-29.

Barnett, J. C., \& Vornovitsky, M. (2016, September 13). Heath insurance coverage in the United States: 2015. In United States Census Bureau. Retrieved April 14, 2017, from https://www.census.gov/ library/publications/2016/demo/p60-257. html

Baumgartner, F.R. \& Jones, B. (2015). The politics of information: Problem definition and the course of public policy in America. Chicago: University of Chicago Press.

Berkowitz, L. (1984). "Some effects of thoughts on anti- and prosocial influences of media events: A cognitive-neoassociation analysis." Psychological Bulletin, 95, 410-427.

Birkland, T.A. (2006). Lessons of disaster: Policy change after catastrophic events. Washington, DC: Georgetown University Press.

Birkland, T. A. (2010). Designing resilience: Preparing for extreme events (pp. 106-128). Pittsburgh, PA: University of Pittsburgh Press.

Birkland, T. A. (2011). Introduction to the policy process: Theories, concepts, and models of public policy making (3rd ed., pp. 25-55). Armonk, NY: M.E. Sharpe, Inc.

Blumenthal, D., \& Morone, J. (2010). The heart of power: Health and politics in the oval office. Berkeley and Los Angeles: University of California Press.

Bosque-Prous, M., Espelt, A., Guitart, A. M., Bartroli, M., Villalbí, J. R., \& Brugal, M. T. (2014). "Association between stricter alcohol advertising regulations and lower hazardous drinking across European countries." Addiction, 109(10), 1634-1643.

Caplan, B. (2007). The myth of the rational voter: Why democracies choose bad policies (pp. 140-150). Princeton, NJ: Princeton University Press.

Chronic Disease Overview (2017). In Centers for Disease Control and Prevention. Retrieved April 3, 2018, from https:// www.cdc.gov/chronicdisease/overview/ index.htm

Chronic diseases: The leading causes of death and disability in the United States (2016, February 23). In Centers for Disease Control and Prevention. Retrieved March 25, 2017.

Colliver, V. (2007, February 11). "Preventive health plan may prevent cost increases: Safeway program includes hot line, lifestyle advice."San Francisco Chronicle.

DeLeo, R. (2010). "Anticipatory-conjectural policy problems: A case study of avian influenza." Risk, Hazards, \& Crisis in Public Policy, 1 (1), 147-184.

DeLeo, R. "Anticipatory policymaking in global venues: Policy change, adaptation, and the UNFCCC." Forthcoming, Futures.

DeLeo, R. (2018). "Indicators, agendas and streams: Analyzing the politics of preparedness." Policy \& Politics, 46 (1), 27-45.

Druckman, J. N. (2001). "On the limits of framing effects: who can frame?" The Journal of Politics, 63, 1041-1066.

Durbin, D. (2014). "Should e-cigarette TV and radio ads be banned?" U.S. News Digital Weekly, 6(18), 13.

Faust, H. S. (2005). "Prevention vs. cure: Which takes precedence?" Medscape Public Health \& Prevention, 3(1).

Food availability documentation (2018, January 17). In United States Department of Agriculture. Retrieved April 3, 2018, from https://www.ers.usda.gov/da-ta-products/food-availability-per-capita-data-system/food-availability-documentation/

Green, D. (1992). "The price elasticity of mass preferences." The American Political Science Review, 86(1), 128-148.

Harbridge, L. (2015). Is bipartisanship dead?: Policy agreement and agenda setting in the house of representatives (pp. 82-95). New York, NY: Cambridge University Press.

Healy, A., \& Malhotra, N. (2009). "Myopic voters and natural disaster policy." The American Political Science Review, 103(3), 387-406.

Healy, A., \& Malhotra, N. (2010). "Random events, economic losses, and retrospective voting: Implications for democratic competence." Quarterly Journal of Political Science. 5(2), 193-208.

Healy, A., \& Malhotra, N. (2013). "Retrospective voting reconsidered." Annual Review of Political Science, 16, 285-306.

Healy, A. J., Malhotra, N., \& Hyunjung Mo, C. (2010). "Irrelevant events affect voters' evaluations of government performance." Proceedings of the National Academy of Sciences. 107(29), 1280412809.

Hollander, B. A. (2007). "Media use and political involvement." In Mass media affects research: Advances through me-ta-analysis (pp. 377-390). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Iyengar, S., \& Kinder, D. R. (1987). News that matters. Chicago: University of Chicago Press.

Jeanne Geiger domestic violence high risk team (2018). In Jeanne Geiger Crisis Center. Retrieved April 12, 2018, from http://www.dvhrt.org/about

Johnson, T., \& Kellstedt, P. (2014). "Media consumption and the dynamics of policy mood." Political Behavior, 36(2), 377-399.

Kingdon, J, (2003). Agendas, alternatives, and public policies, $2^{\text {nd }} E d$, New York: Addison-Wesley Educational Publisher.

Krosnick, J.A., \& Kinder, D. R. (1990). "Altering the foundations of popular support for the president through priming: Reagan and the Iran-contra affair." American Political Science Review, 84, 495-512.

Kunreuther, H. (2008). "Reducing losses from catastrophic risks through longterm insurance and mitigation." Social Research, 75(3), 905-930.

Lazarus, D. (2005, June 8). "Costs of health care drag America down." San Francisco Chronicle.

Lizzeri, A., \& Persico, N. (2001). "The provision of public goods under alternative electoral incentives." American Economic Review, 91(1), 225-239.

Malhotra, N., \& Krosnick, J. (2007). "Retrospective and prospective performance assessments during the 2004 election campaign: Tests of mediation and news media priming." Political Behavior, 29(2), 249-278.

Malhotra, N., \& Kuo, A. G. (2008). "Attributing blame: The public's response to hurricane Katrina." Journal of Politics, 70(1), 120-135.

Malhotra, N., \& Kuo, A.G. (2009). "Emotions as moderators of information cue use: Citizen attitudes towards hurricane Katrina." American Politics Research. 37(2), 301-326.

Malhotra, N., \& Margalit, Y. (2014). "Expectation setting and retrospective voting." Journal of Politics, 76(4), 10001016.

May, P. J. (1992). "Policy learning and failure." Journal of Public Policy II, 12(4), 331-354.

Mays, G. P., \& Smith, S. A. (2011). "Evidence links increases in public health spending to declines in preventable deaths." Health Affairs, 30(8), 1585-93.

McCombs, M., \& Shaw, D. (1972). "The agenda setting function of mass media." Public Opinion Quarterly, 36, 17687.

National democratic issue 2013. (2013). Retrieved from www.ndi.org

National health expenditure data: Historical (2016, December 6). In Center for Medicare and Medicaid Services. Retrieved April 14, 2017, from https://www. cms.gov/research-statistics-data-and-sys-tems/statistics-trendsandreports/national-healthexpenddata/nationalhealthaccountshistorical.html

Nelson, T. E., \& Oxley, Z. M. (1999). "Toward a psychology of framing effects." Political Behavior, 19, 221-246.

OECD better life index: Health organization for economic co-operation and development. (2014). Retrieved from http://www.oecdbetterlifeindex.org/topics/health/
P.L. 111-148: The patient protection and affordable care act. Section 4002: Prevention and public health fund. 111th Congress. Enacted March 23, 2010.

Patient protection and affordable care act, 42 U.S.C. § 18001 (2010).

Prevention and public health fund: Dedicated to improving our nation's public health (2001). In American Public Health Association. Retrieved March 31, 2017.

Prevention for a healthier America: Investments in disease prevention yield significant savings, stronger communities. (February 2009). Washington, D.C.: Trust for America's Health. Retrieved from http://healthyamericans.org/reports/ prevention08/Prevention08.pdf

Reichert, F., \& Print, M. (2017). "Mediated and moderated effects of political communication on civic participation." Information, Communication \& Society, 20(8), 1162-1184.

Rochefort, D. A., \& Cobb, R. W. (1994). The politics of problem definition: shaping the policy agenda (pp. 1-216). N.p.: University Press of Kansas.

Rousseau, J. (1762). The Social Contract. N.p.: Swan Sonnenschein \& Co.

Sears, D. O., \& Citrin, J. (1985). Tax revolt: Something for nothing in California. Cambridge, MA: Harvard University Press.

Sofgre, E. (2008). "How to fix U.S. infrastructure." Popular Mechanics, 185, 60-75.

Stern, A. (2006, Jul 17, 2006). "Horse-and-buggy health coverage." Wall Street Journal Retrieved from http://ezp.bent-ley.edu/login?url=https://search.proquest.com/docview/398967916?account id $=8576$

Wanta, W. (1997). The public and the national agenda: How people learn about important issues. Lawrence Erlbaum Associates.

Wanta, W. (1989). "How president's state of union talk influenced news media agendas." Journalism \& Mass Communication Quarterly, 66(3), 537-541.

Ward, B.W., Schiller, J.S., \& Goodman, R.A. (2014). "Multiple chronic conditions among U.S. adults: A 2012 update." Preventing Chronic Disease 2014.

Weaver, D., \& Elliott, S. (1985). "Who sets the agenda for the media? A study of local agenda-building." Journalism Quarterly, 62, 87-94.

# Measuring the Effect of Demographic, Economic, and Political Factors on Voter Turnout in the 2016 Presidential Election 

By Ryan Amelio*

This research analyzes the determinants of voter turnout on a district level for the House of Representatives in the 2016 Presidential Election. To determine the impact of various demographic, economic, and political factors on voter turnout, an econometric model was specified and estimated using House-published election reports and 2016-2017 U.S. Census Bureau surveys for 376 Congressional Districts. The results show that several factors, including the voter's race, the number of ballot initiatives on the ballot, and education level, influenced the likelihood of an eligible voter participating in the election. This research also finds evidence that ballot initiatives' positive role in increasing electoral participation is not without bound, which is contrary to prior findings. In the end, results mostly confirm the expected direction of the impacts of the analyzed determinants of voter turnout in 2016, thus supporting the underlying theoretical factors most responsible for influencing voter participation rates at the district level.

Keywords: Voter Turnout, Voter Participation, Ballot Initiatives, Ballot Fatigue, Econometric Modelling.

## I. Introduction

In the United States, voter turnout rates experience large fluctuations between midterm and presidential election years. Figure 1 displays voter turnout among eligible citizens for midterm and presidential elections, as recorded by Veracity Media (2018), from 1916 through 2016. On average, voter turnout rates have been approaching $57.36 \%$ of eligible voters in presidential elections and $40.91 \%$ of eligible voters in midterm elections. As illustrated, voter turnout has not been constant over the recorded years. The commonly observed 10 to 20 percent differences in voter turnout between midterm and presidential elections reflect changes in the electorate, as different socioeconomic groups are more likely to vote in different types of elections.

[^8]
## Figure 1

Voter Turnout in Midterm and Presidential Elections (1916 - 2016)


Data source: Veracity Media (2018)
As seen in Figure 1, voter turnout in presidential and midterm elections follow very similar fluctuation patterns while maintaining a 10 to 20 percent difference in turnout. For example, the lowest voter turnout rate between 1916 and 2016 for both presidential and midterm elections occurred in 1924 (48.9\%) and 1926 (32.9\%), respectively. Similar fluctuation patterns are also observable in the highest voter turnout rate for presidential and midterm elections, which occurred in 1960 (63.8\%) and 1966 ( $48.7 \%$ ), respectively. The low and high in voter turnout followed a similar pattern and occurred within only a few years of each other.

Voter turnout may also vary by state and voting district depending on factors that vary across the country, such as state-specific election laws or district-level electoral competitiveness ("Voter Turnout"). For decades, understanding the factors responsible for changes in levels of voter turnout has been the subject of extensive research, as analyses of the determinants of voter turnout in different election years and over time can be of tremendous use to both politicians planning election campaigns and electoral scholars seeking a deeper understanding of the American electorate.

On a related note, since municipalities conduct elections, information regarding the determinants of voter turnout would be extremely useful for registrars of voters, the local elected officials responsible for overseeing elections. The ability to predict voter turnout based on the demographic, economic, and political landscape of the municipality would allow registrars to allocate sufficient resources to polling places and Election Day staff. Such information allows registrars to hire the appropriate number of poll workers at polling locations and order enough ballots for each election. This ensures that the polling places can run more smoothly, and avoid reverting to emergency procedures in the event of overcrowding at the polls or ballot shortages, which can depress voter turnout. Alternatively, registrars can use information on voter turnout in comparison with information on the residents of the municipality to determine what groups of residents are voting less than other groups. Then, registrars can conduct more
successful voter registration drives and outreach programs that target residents with specific characteristics, raising voter turnout.

In sum, the purpose of this research is to investigate what aggregate characteristics in the electorate and the American political system determine the likelihood that a representative eligible citizen would vote in the 2016 Presidential Election. This study will focus on the aggregate characteristics of voters and the electoral system in individual district-level contests for the House of Representatives in order to conduct a regression that will allow for the prediction of aggregate voter turnout in any congressional district.

## II. Literature Review

Voter turnout is a well-established and significant factor in analyzing the outcomes of elections, and is thus a topic of great interest within the realm of political analysis. Anthony Downs's An Economic Theory of Democracy (1957) is the pioneering text in analyzing the importance of understanding the determinants of voter participation. In the context of voter turnout, Downs proposes a behavioral economic model, which theorizes that a voter's decision to vote hinges on whether, in the two-party system Downs studied, he or she can identify one party that he or she associates with more. If the voter can identify such a party, he or she will act rationally and cast his vote in the direction in which he or she believes will reward him or her the largest benefit, should that party win. While Downs's application of behavioral economic theory in order to explain voter turnout appears sound, his theory minimizes the impact of socioeconomic factors and other demographic information on voter turnout. According to Downs, the rational behavior of an elector is driven by preferences that exist on an individual level, rather than shared preferences of individuals belonging to the same socioeconomic, demographic, or political groups.

In the decades following Downs's publication, researchers' focus shifted away from individual rational voter behavior and towards measurable demographic characteristics' impact on a voter's likelihood to vote. For instance, Powell (1986) researched demographics' effects on voter turnout in the United States and 11 other industrialized democracies in an effort to explain why the United States has relatively low voter turnout, even though the United States' attitudinal environment is more favorable to all kinds of citizen participation, including voting.

Powell studied the American institutional setting, and specifically the two-party system and voter registration, voter turnout, and demographic information, using nearly three decades of election data. Powell found education level and age to be the most significant factors in determining voter turnout, with large gaps in participation rates between non-high school graduates, high school graduates, and college graduates, in addition to an exponential increase in participation rates with age. In contrast, Powell found that the American voter registration process, an institutional factor, to be the most significant hindrance to voter turnout because of America's unique policy among
comparison countries, using these countries as a baseline, to require its citizens to actively maintain their voter registration record in order to retain their ability to vote.

Opportunity costs for voting exist everywhere, and at a minimum, citizens have to take a significant amount of time out of their day to go to polling locations. However, the United States has an even higher opportunity cost than other countries because Americans have to complete specific actions periodically to maintain their voter registration records and their right to vote, which could depress voter turnout rates.

Powell conducted his research in a relatively new field, using data from the 1960s through the 1980s to identify significant variables effecting voter turnout. However, Powell only identified a handful of significant variables, and the researchers that followed gradually improved the model by adding variables representative of demographic factors to their voter turnout analyses. The analysis of additional variables focuses on one or two new demographic factors at a time, such as race, sex, or education level.

Tam Cho, Gimpel, and Dyck (2006) pursued a line of research in relation to voter turnout more closely related to Powell's research, as the team analyzed sociodemographic factors directly overlapping with those analyzed by Powell, such as education and income. Tam Cho, Gimpel, and Dyck found education and income to have a significant positive effect on voter turnout, which is similar to Powell's findings. However, their argument does little to address the potential issue of multicollinearity between education and income. Furthermore, multicollinearity is an issue because of the expected relationship of increasing income with additional years of education.

Powell and others' research, in part, establishes that education is one of the most important factors in determining the probability that an eligible citizen will vote. With that said, this work does little to differentiate the fluctuations in the effect of education on voter turnout while a voter is in school and its impact following graduation. Tenn (2007) investigates the hypothesis that education makes a voter more likely to vote. To do this, he differentiates the effect active enrollment in a high school or university and a degree from a high school or university have on voter turnout. Tenn found that being an 18 or older high school or college student has a significant positive impact on voter turnout and voter registration. However, he also finds that additional years of schooling had no significant effect on voter turnout or voter registration once the analysis addressed the issue of selection bias in education choice. Tenn finds, in direct contrast to Powell and Tam Cho, Gimpel, and Dyck's findings, that being in an educational environment increases the probability that an individual will turnout only while they are in that environment, and that the effect of education on voter turnout diminishes once the individual leaves school. Tenn's contributions are significant in identifying a possible increase in opportunity cost once the student graduates, but are also lacking in that his model cannot account for the impact of schooling below the eleventh grade, as students are not yet of voting age. The limitations on Tenn's findings results in his claim being questionable, because the model ignores the K through 10 years of an individual's educational career.

While demographic and economic factors, including education, income, and sex, affecting voter turnout rates are far greater in number and written about much more
frequently, institutional factors started to be examined in the literature review. Tolbert, Grummel, and Smith (2001) expanded on Powell's analysis of institutional factors with extensive research on the effect of ballot initiatives across various states on voter turnout. Tolbert, Grummel, and Smith compared voter turnout in states that allow citizen-initiated ballot initiatives to amend the state constitution and those who do not. Ballot measures' anticipated importance stems from its ability to allow citizens to vote directly on laws and amendments to the state constitution. Instead of voting for representatives to then vote on laws, citizens are able to participate in a direct democratic process, raising the perceived value of participating in an election. In this study, they found initiative states have a $7 \%$ to $9 \%$ higher voter turnout rate in midterm elections, and a $3 \%$ to $4.5 \%$ higher voter turnout rate in presidential elections in the 1990s. One of the most significant findings to come from their research was that, while increasing initiatives result in marginally higher turnout rates, one ballot measure per election is sufficient to stimulate significantly higher levels of voter turnout. This contradicted the previous belief that multiple ballot measures needed to be present on a ballot to have a substantial effect. Also highlighted in the study, was the lack of reduction in voter turnout, regardless of how many ballot measures were present on the ballot, which contradicted the belief that numerous ballot initiatives created ballot fatigue.

Gerber, et al. (2009) researched battleground states, a byproduct of the Electoral College in the United States, and their impact on voter turnout to join Powell and Downs in researching influential institutional factors. Gerber, et al. compared voter turnout for states both with and without battleground status, defined as a state where presidential and congressional contests are close. Under Gerber, et al.'s definition of battleground status, this factor is an institutional factor, because it is a byproduct of the two-party system and the Electoral College. They found the increase in voter turnout due to a state's battleground status is about one-eighth of the increase in voter turnout because of a presidential election year. This finding suggests that factors affecting the national electorate, such as a presidential election year, have a much larger impact on voter turnout than state-level factors, such as a state's battleground status. Battleground status can result in a small increase in voter turnout that is still significant, but its impact is small relative to demographic and other institutional factors.

O'Dell and Marks (2016) examine district-level data and conduct a comprehensive analysis on the determinants of voter turnout for the 2014 Midterm Election. In their model, they include demographic, economic and institutional variables to capture the effect of a wider array of factors that influence voter turnout. Specifically, demographic variables capture the makeup of the voting population's effect on voter turnout, economic variables capture the effect of education and income, and institutional variables capture the effect of voting procedures built into the election process, such as incumbent advantages and the ballot initiative process. O'Dell and Marks find racial composition of districts, margin of victory, battleground status, and ballot measures to be significant determinants in predicting voter turnout. Their findings support those of Downs: that age and sex, and specifically being male, are significant factors in deter-
mining a district's aggregate voter turnout. O'Dell and Marks also found that battleground status is significant, but the impact of battleground status was much larger in their model compared to the effect measured by Gerber, et al. (2009). Similarly, O'Dell and Marks's findings support Tolbert, Grummel, and Smith's (2001) initial analysis of the positive relationship between voter turnout and the number of ballot measures that appear on a state ballot in a midterm election.

## III. Economic Theory

This research will construct a presidential election participation model to predict voter turnout using three main categories of explanatory variables. Equation 1 represents the general specifications central to the economic model. These variables will capture the effect that social demographics, the economic environment, and political systems have on voter turnout.

Equation 1: Voter Turnout $=F(D, E, P)$
Demographic variables (D) measure voter turnout's relationship with characteristics inherent to voters. For example, it will measure the change in the probability of voting as people age, their sex, and if they identify as white or a minority race. In contrast, economic environment variables (E) correspond to an individual's financial status and education level, and its effect on their likelihood to vote. Lastly, political variables ( P ) correspond to institutional frameworks in the American political system, such as what ballot characteristics and candidate vote shares affect overall voter turnout rates. What follows is a more detailed discussion of each of these factors and their theoretically expected impact on voter turnout.

## Demographic Factors

Powell's (1986) research is among a collection of existing literature that provides significant evidence of the importance of several demographic factors (D), including a positive relationship between age and voter turnout. Similar to Powell (1986) and O'Dell and Marks (2016), this research will use three factors to capture a district's demographic characteristics. To capture the effects of age, this research includes the population over 65 . Theoretically, it is hypothesized that senior citizens exemplify the effect of increasing participation with age. The hypothesis suggests that this segment of the population exercises their right to vote more than any other age group. This is likely because many senior citizens are retired, and therefore have a lower opportunity cost associated with voting.

Tolbert, Grummel and Smith (2001) find a positive relationship between white eligible voters and voter turnout, and the negative relationship between minority eligible voters and voter turnout. According to the authors, white voters historically had greater
access to information outlets and mobilizing institutions, suggesting an increased voter turnout rate, accounting for this factor in the analysis. In sum, non-minority voters have had greater access to election information and resources. A positive relationship between voter turnout rates and an individual being white is predicted. Therefore, it is hypothesized that greater access to election information and resources has a positive effect on a district's voter turnout. However, general access to such information and resources has increased with racial equality since research on the determinants of voter turnout began in the last half of the $20^{\text {th }}$ century. Moreover, it is possible that the positive relationship between voter turnout rates and individuals being white has lessened.

Powell (1986) also finds a positive relationship between males and voter turnout, although he classifies the relationship as insignificant once he takes into account interest and party identification. Additionally, O'Dell and Marks (2016) find a strong positive relationship between males and voter turnout. The strong male leadership of typical American households at the time of Powel's initial findings help explain the positive relationship between males and voter turnout. Furthermore, the model includes a variable corresponding to the percent of the population in a district that is male to test Powel (1986) and O'Dell and Marks' (2016) findings in 2016 and capture the effect of a historically major determinant of voter turnout.

## ECONOMIC FACTORS

Two economic factors (E) are hypothesized to influence voter turnout at the district level. First, the model includes a variable representing the percent of the population in a district with a college diploma. There is a long-held belief that higher levels of education increase an individual's exposure to opportunities for civic involvement and their importance. Powell (1986), Tenn (2007) and Tam Cho, et al. (2006) find evidence that education and active involvement in an educational institution have significant impacts on an individual's likelihood of voting. Moreover, the expectation is that the more educated an individual, the more knowledge he or she possesses and he or she is more likely to vote. Meaningful research, including that of Tam Cho, et al. (2006) present evidence of a positive relationship between voter turnout and both education and income. The median income of households in each district is included in the model, as the more an individual earns, the more of a stake he or she has in economic and tax policies resulting from an election outcome. ${ }^{1}$

[^9]
## Political Factors

The model utilizes several variables to capture the effect of political factors ( P ) on an individual's decision to vote. One factor concerns whether the incumbent won in the specified congressional district. This factor indicates that in the model an incumbent victory likely signals a lack of competitiveness in a race. O’Dell and Marks (2016) found that an incumbent victory was associated with lower turnouts for that district.

Incumbent victory is measured to capture the voters' awareness of the competitiveness of the race, and whether a strong incumbent advantage discourages turnout. Similar to an incumbent victory, the intention of incorporating margins of victory in both a House of Representatives and Presidential contest is to measure their competitiveness and their effects on voter turnout. At the district level, a negative relationship between margin of victory for House contests and voter turnout rates is expected, as an increase in margin of victory indicates a less competitive contest. At the state level, a similar relationship for margin of victory in the presidential race is anticipated. The same margin of victory for president is applied to every district in the state because states do not count votes for president by district, but by municipalities, and district lines often divide individual municipalities into segments. Similar to the variable used by Gerber, et al. (2009), this variable is meant to measure the effect of battleground status by measuring the impact a shrinking margin of victory for president on a state level has on voter turnout. The expectation is that as the margin of victory for president nears zero, the positive effect the explanatory variable has on voter turnout increases.

The model also incorporates the number of ballot measures on a state ballot into the regression in the form of an explanatory variable. This variable is introduced because, as demonstrated by Tolbert, Grummel, and Smith (2001), increasing ballot measures on a ballot suggest higher levels of voter turnout with no ballot fatigue. In theory, the marginal increase in voter turnout from each additional measure on the ballot, for an unlimited number of ballot measures, should never be negative. Moreover, the opportunity for citizens to vote directly on legislation and state constitutional amendments is expected to have a positive effect on voter participation.

To summarize the theoretical expectations of each of the model's factors, Table 1 presents the factors being used in the analysis and a summary of each factor's hypothesized sign as to its impact on voter turnout.

## Table 1

Definitions and Expected Signs

| Variable | Definition | Expected Sign |
| :---: | :---: | :---: |
| Voter Turnout | Percent of 18+, eligible citizens, that voted in district $i$ | Dependent Variable |
| Demographic Factors (D) |  |  |
| Population over 65 | Percent of the population over the age of 65 in district $i$ | + |
| White | Percent of the population that is white in district $i$ | + |
| Male | Percent of the population that is male in district $i$ | + |
| Economic Factors (E) |  |  |
| College Diploma | Percent of the population with a college diploma in district $i$ | + |
| Median Income | Median income of the households in district $i$ | + |
| Political Factors (P) |  |  |
| Margin of Victory (House) | Percent difference in the share of votes received between the two major party candidates for the House of Representatives race in district $i$ | - |
| Ballot Measures | Number of ballot measures appearing on the state ballot in which district $i$ is located | + |
| Margin of Victory (President) | Percent difference in share of votes received between the two major party candidates for President in which district $i$ is located | - |
| Incumbent Winner | Dummy variable that is equal to 1 if the winner of the district $i$ House race was the incumbent | - |

## IV. Data and Economic Model

The goal of this analysis is to build on previous research, specifically O'Dell and Marks' (2016) district-level analysis of the determinants of voter turnout in the 2014 Midterm Election. Focusing on contests in the United States House of Representatives, the model will analyze select cross-sectional election data from the U.S. Census Bureau corresponding to the 2016 Presidential Election. Conducting a similar regression analysis with an updated data set will aid in determining what variables from the three categories of factors (D, E, and P) maintained a consistent finding from the 2014 Midterm Election. An analysis of the 2016 Presidential Election will also help identify any changes in the effects of demographic, economic, and political factors in a presidential election year versus a midterm election year.

The dependent variable used in this regression will be the rate of voter turnout, defined as persons eligible to vote in each congressional district who voted in 2016. Fifty-nine congressional districts were excluded from the dataset used for the analysis, resulting in a data set consisting of information from 376 congressional districts. ${ }^{2}$

Table 2 presents the basic descriptive statistics for the variables used in the analysis.
Table 2
Basic Descriptive Statistics

| Variable | Obs. | Mean | Std. Dev. | Min | Max |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Voter Turnout | 376 | 58.4986 | 7.7493 | 38.3351 | 78.4897 |  |
| Demographic <br> Factors (D) |  |  |  |  |  |  |
| Population over 65 | 376 | 20.2598 | 3.8049 | 12.0051 | 40.5082 |  |
| White | 376 | 77.1974 | 16.8324 | 17.5838 | 96.3859 |  |
| Male | 376 | 48.4675 | 1.3181 | 43.5795 | 53.4760 |  |
| Economic <br> Factors (E) |  |  |  |  |  |  |
| College Diploma | 376 | 27.7886 | 9.9906 | 9.8378 | 87.5939 |  |
| Median Income <br> (Thousands of <br> Dollars) | 376 | 63.4948 | 17.1104 | 28.0420 | 134.0770 |  |
| Political <br> Factors (P) |  |  |  |  |  |  |
| Margin of Victory <br> (House) | 376 | 31.6447 | 17.7252 | 0.5226 | 92.8657 |  |
| Incumbent Winner | 376 | 0.8723 | 0.8723 | 0 | 1 |  |
| Ballot Measures | 376 | 3.9521 | 3.9521 | 0 | 17 |  |
| Margin of Victory <br> (Pres) | 376 | 15.7113 | 15.7113 | 0.2353 | 51.4106 |  |

Data sources: United States Census Bureau (2016), Haas (2016a), Ballotpedia (2016), Haas (2016b), United States Census Bureau (2017).

The average turnout rate of the 376 congressional districts analyzed was 58.50 percent and ranged between 38.34 percent and 78.49 percent. Regarding demographic factors (D), the average congressional district senior citizens comprise 20.26 percent

[^10]of its eligible voting-age population (henceforth referred to simply as 'population'). In conjunction, the average congressional district has a population that is 77.20 percent white and 48.47 percent male. However, the white proportion of a congressional district fluctuates greatly, ranging between 17.58 percent to 96.39 percent in 376 observations. Moreover, 22.80 percent of the average population are members of a minority race, and is the basis of investigating whether there is a significant difference in the likelihood that individuals of different races will vote.

As previously discussed, the impact of economic factors (E) are captured by measuring the percent of the population with college diplomas and the median income of each congressional district. The average congressional district has a population with a median household income of $\$ 63,494.80$ and 27.79 percent of that population holding a college degree. Both the percentage of the population holding a college degree and household median income varied widely, with the percent of college graduates ranging between 9.84 percent and 87.59 percent and median household income ranging between $\$ 28,042.00$ and $\$ 134,077.00$.

The impact of political factors $(\mathrm{P})$ on voter turnout are captured through a variety of factors. They include margin of victory in contests for representatives and president, whether the winner is an incumbent, and the number of state ballot initiatives appearing on the ballot. On average, major party candidates for the House won a contest in a congressional district by a 31.64 percent margin of victory and presidential candidates won a state by an average margin of victory of 15.71 percent. The margin of victory in both the House and for president ranged from recount-eligible races to landslide victories. The margin of victory for the House and for president ranged from 0.52 percent to 92.87 percent and from 0.24 percent to 51.41 percent, respectively. Additionally, the incumbent won 87.23 percent of contests for a seat in the House and the average state ballot displayed 3.95 ballot initiatives for the voter to decide on directly.

To complete this analysis, this research will investigate two econometric model specifications in an attempt to predict a district's voter turnout. Equation 2 forms the base model to estimate voter turnout and is estimated using Ordinary Least Squares (OLS). ${ }^{3}$

[^11]
## Equation 2:

$Y_{i}=\beta_{0}+\beta_{1} X_{1 i}+\beta_{2} X_{2 i}+\beta_{3} X_{3 i}+\beta_{4} X_{4 i}+\beta_{5} X_{5 i}+\beta_{6} X_{6 i}+\beta_{7} X_{7 i}+\beta_{8} X_{8 i}+\beta_{9} D_{i}+\epsilon_{i}$
where:
$Y_{i}=$ The voter turnout in district $i$
$X_{l i}=$ The percent of the population over age 65 in district $i,\left(\beta_{1}>0\right)$
$X_{2 i}=$ The percent of the population that is white in district $i,\left(\beta_{2}>0\right)$
$X_{3 i}=$ The percent of the population that is male in district $i,\left(\beta_{3}>0\right)$
$X_{4 i}=$ The percent of the population with a college diploma in district $i,\left(\beta_{4}>0\right)$
$X_{5 i}=$ The median income of the households in district $i,\left(\beta_{5}>0\right)$
$X_{\sigma i}=$ The margin of victory for the House of Representatives race in district $i,\left(\beta_{6}<0\right)$
$X_{7_{i}}=$ The number of ballot measures appearing on the ballot in district $i,\left(\beta_{7}>0\right)$
$X_{8 i}=$ The margin of victory for president in the state where district $i$ is located, $\left(\beta_{8}<0\right)$
$D_{i}=\left\{\begin{array}{l}1 \text { if the winner of district } i \text { is the incumbent } \\ 0 \text { otherwise }\end{array},\left(\beta_{9}<0\right)\right.$
$\epsilon_{i}=$ The stochastic error in the model

Table 3 presents the OLS regression estimate of Equation 2. ${ }^{4}$ The Ramsey Test indicated a specification error $(F-s t a t i s t i c=4.10, p-v a l u e=0.0070)$ and the BreuschPagan Test indicated severe heteroscedasticity $\left(\chi^{2}=43.18, p\right.$-value $\left.=0.0000\right)$. Corrective procedures were followed to address the issue of heteroscedasticity observed in the OLS regression estimates for the base model by calculating the OLS regression estimates with a robust standard error.

In general, the estimates presented in Table 3 are in agreement with the findings of O'Dell and Marks (2016) and others. Overall, $51.55 \%$ of variation in voter turnout is explained by the regression model. Statistically, at least one factor is important in explaining the variability. Specifically, a voter being white has a statistically significant positive impact on voter turnout. The model estimates that for every additional percentage point of a congressional district's population that is white, voter turnout increases by 0.13 percent.

[^12]
## Table 3

OLS Regression Estimates for Base Model

| Variable | Coefficient | Robust <br> Standard Error | T-Stat | $\mathbf{P}>\|\mathbf{T}\|$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Demographic Factors (D) |  |  |  |  |  |  |  |
| Population over $65\left(X_{l i}\right)$ | 0.2566 | 0.0949 | 2.70 | $0.007^{* * *}$ |  |  |  |
| White $\left(X_{2 i}\right)$ | 0.1348 | 0.0312 | 4.32 | $0.000^{* * *}$ |  |  |  |
| Male $\left(X_{3 i}\right)$ | -0.8563 | 0.3357 | -2.55 | $0.011^{* *}$ |  |  |  |
| Economic Factors (E) |  |  |  |  |  |  |  |
| College Diploma $\left(X_{4 i}\right)$ | 0.2028 | 0.0727 | 2.79 | $0.006^{* * *}$ |  |  |  |
| Median Income $\left(X_{5 i}\right)$ | 0.1346 | 0.0337 | 3.99 | $0.000^{* * *}$ |  |  |  |
| Political Factors (P) |  |  |  |  |  |  |  |
| Margin of Victory $($ House $)$ <br> $\left(X_{6 i}\right)$ | -0.0168 | 0.0211 | -0.80 | 0.435 |  |  |  |
| Incumbent Winner $\left(D_{i}\right)$ | -1.1868 | 0.8703 | -1.36 | 0.173 |  |  |  |
| Ballot Measures $\left(X_{7 i}\right)$ | 0.0690 | 0.0576 | 1.20 | 0.231 |  |  |  |
| Margin of Victory $($ Pres $)$ <br> $\left(X_{8 i}\right)$ | -0.2119 | 0.02778 | -7.63 | $0.000^{* * *}$ |  |  |  |
| Constant | 74.8326 | 15.8958 | 4.71 | 0.000 |  |  |  |

$\mathrm{N}=376$, F-Statistic $=43.33, \mathrm{R}^{2}=0.5155$
$*=$ significant at $10 \%, * *=$ significant at $5 \%, * * *=$ significant at $1 \%$

The percentage of the population over the age of 65 has a statistically significant positive effect, while the percentage of the population that is male has a statistically significant negative effect on a district's voter turnout. The marginal change for the proportion of the population over 65 and the percentage that is male is estimated to be 0.26 and -0.86 percent, respectively.

Notably, the estimated impact of a percentage increase in the male population of a congressional district on voter turnout is negative, which conflicts with the predicted positive sign and will be further discussed in the conclusion. However, O'Dell and Marks (2016) found the two variables' effects to be insignificant. In part, the difference in the effect of the male population on voter turnout between 2014 and 2016 is likely because of the unique matchup of the 2016 Presidential Candidates. When asked to pick between Trump and Clinton in an October 2016 Reuters/Ipsos poll, 44 percent of women chose Clinton while 29 percent chose Trump (Kahn, 2016). The combination of Hillary Clinton being the first female major party candidate and Donald Trump's controversial remarks about women likely mobilized a greater percentage of the eligible female population to vote, causing the effect of the male population on voter turnout to be negative.

The estimates for the base model also found both variables meant to capture the effect of economic factors on voter turnout to be significantly positive. The model
estimated that a percentage point increase in the percent of the population of a congressional district with a college degree results in a 0.20 percent increase in voter turnout. The increase in voter turnout per every thousand-dollar increase in median household income was estimated as 0.13 percent. O'Dell and Marks (2016) found both median household income and the percentage of the population with a college degree to have a positive impact on voter turnout, but median income was only found to be significant after removing their education variables. O'Dell and Marks considered the multicollinearity between median income and levels of education to be too severe to include both variables in the same regression, while this research indicates multicollinearity between these two factors are not an issue in the estimation of voter turnout.

Regarding political factors ( P ), this research found the margin of victory for the presidential race to be the only variable representing political factors to be statistically significant in its impact on voter turnout. The OLS regression estimate for the base model found that for every additional percent increase in the margin of victory between the two major party presidential candidates on a state level, voter turnout decreased by 0.21 percent. This research found the margin of victory between the two major party House candidates in a congressional district, whether the House incumbent won the contest, and the number of ballot measures that appear on a state ballot, to be insignificant. While sharing the finding that the effect of an incumbent winner is statistically insignificant, O'Dell and Marks (2016) found ballot measures to be significant at the 1,5 , and 10 percent significance levels. O'Dell and Marks only measured the margin of victory for House races and found it to be significant, while this research found the margin of victory for House races to be insignificant. ${ }^{5}$

Upon further analysis, the results of the Ramsey Test for Equation 2 indicates a possible specification issue with the model. In an attempt to address this issue, Equation 3 presents an alternative econometric model of a district's voter turnout. Equation 3 is the expanded model that tests a non-linear functional form as a better potential fit for the model. Specifically, variables of median income squared $\left(\mathrm{X}_{5 \mathrm{i}}{ }^{2}\right)$ and ballot measures squared $\left(\mathrm{X}_{7 \mathrm{i}}{ }^{2}\right)$ are included in the model specification. Once again, a Ramsey Test and a Breusch-Pagan Test are conducted to test for specification error and heteroscedasticity. This research fails to reject the null hypothesis that the model has no specification bias in the Ramsey Test at the 10 percent significance level (F-statistic $=$ 2.22), suggesting Equation 3 is preferable to Equation 2. However, the Breusch-Pagan Test indicates severe heteroscedasticity $\left(\chi^{2}=50.34\right.$, p-value $\left.=0.0000\right)$ and corrective procedures are taken by conducting a heteroskedastic-corrected regression estimate for the expanded model with a robust standard error. Table 4 presents the findings of the OLS regression estimate for Equation 3.

[^13]
## Equation 3:

$Y_{i}=\beta_{0}+\beta_{1} X_{1 i}+\beta_{2} X_{2 i}+\beta_{3} X_{3 i}+\beta_{4} X_{4 i}+\beta_{5} X_{5 i}+\beta_{6} X_{5 i}^{2}+\beta_{7} X_{6 i}+\beta_{8} X_{7 i}+\beta_{9} X_{7 i}^{2}+\beta_{10} X_{8 i}+\beta_{11} D_{i}+\epsilon_{i}$

## Table 4

OLS Regression Estimates for Expanded Model

| Variable | Coefficient | Robust <br> Standard Error | T-Stat | $\mathbf{P}>\|\mathbf{T}\|$ |
| :---: | :---: | :---: | :---: | :---: |
| Demographic Factors (D) |  |  |  |  |
| Population over $65\left(X_{l i}\right)$ | 0.2566 | 0.0949 | 2.70 | 0.007*** |
| White ( $X_{2 i}$ ) | 0.1348 | 0.0312 | 4.32 | 0.000*** |
| w ( $X_{3 i}$ ) | -0.8563 | 0.3357 | -2.55 | 0.011** |
| Economic Factors (E) |  |  |  |  |
| College Diploma ( $X_{4 i}$ ) | 0.2028 | 0.0727 | 2.79 | 0.006*** |
| Median Income ( $X_{5 i}$ ) | 0.1346 | 0.0337 | 3.99 | 0.000*** |
| Political Factors (P) |  |  |  |  |
| Margin of Victory (House) $\left(X_{6 i}\right)$ | -0.0168 | 0.0211 | -0.80 | 0.435 |
| Incumbent Winner ( $D_{i}$ ) | -1.1868 | 0.8703 | -1.36 | 0.173 |
| Ballot Measures ( $X_{7 i}$ ) | 0.0690 | 0.0576 | 1.20 | 0.231 |
| Margin of Victory (Pres) $\left(X_{\delta_{i}}\right)$ | -0.2119 | 0.02778 | -7.63 | 0.000*** |
| Constant | 74.8326 | 15.8958 | 4.71 | 0.000 |

$\mathrm{N}=376$, F-Statistic $=38.26, \mathrm{R} 2=0.5490$
$*=$ significant at $10 \%, * *=$ significant at $5 \%, * * *=$ significant at $1 \%$

There are no substantial changes in impact or significance for the variables found to be significant in the OLS regression estimates for the base model, except for median income and ballot measures. The addition of a variable representing median income squared in capturing the non-linear effect of median income on voter turnout in a congressional district suggests a better fit for the model. The expanded model estimation indicates that for every thousand-dollar increase in median household income, voter turnout increases by 0.39 percent, compared to the 0.13 percent increase estimated by the base model. However, given the negative sign coefficient for the variable median income squared ( $\mathrm{X}_{5 \mathrm{i}}{ }^{2}$ ), increases in median income have limits on its positive relationship with voter turnout. Specifically, voter participation increases up to the point where household income equals $\$ 123,468.75$. Income levels higher than $\$ 123,468.75$ estimate a decrease in voter turnout.

Similar to a model estimation conducted by Tolbert, Grummel, and Smith (2001), ballot measures squared $\left(\mathrm{X}_{7 \mathrm{i}}{ }^{2}\right)$ was incorporated into the standard model to both establish a better fit for the model and evaluate whether there is a point of ballot fatigue. Ballot fatigue is defined as a point where after including a specified maximum number
of ballot initiatives on a state ballot, additional ballot measures will begin to have a negative impact on voter turnout. Both O'Dell and Marks (2016) and Tolbert, Grummel, and Smith found no evidence of ballot fatigue. Similar to past research, this investigation finds ballot measures to have a significant positive impact on voter turnout, where each additional ballot measure included on the ballot results in a 0.91 percent increase in voter turnout. However, unlike Tolbert, Grummel, and Smith (2001) and O'Dell and Marks, this research finds a ballot fatigue point of 8.32 ballots. Instead of an infinite number of ballot initiatives on a state ballot resulting in a continuously positive marginal increase in voter turnout, this research finds that after an average 8.32 ballots, each additional ballot measure will have a statistically significant negative impact on voter turnout. The detection of ballot fatigue in the 2016 Presidential Election is a significant finding of this research and will be further discussed in the conclusion.

## V. Conclusion

This research presents findings that partially confirm previous research, specifically that of Tolbert, Grummel, and Smith (2001) and O'Dell and Marks (2016). The significance of race, college education, median income, and ballot measures in both the 2014 Midterm and 2016 Presidential Elections suggests that these factors retain their significance regardless of a midterm or presidential year. However, the significance of senior citizen status and voters' sex in this research compared to statistical insignificance during a midterm election suggests that these demographic groups are among those who turnout in lesser numbers and contribute to the 10 to 20 percent gap in voter turnout between midterm and presidential elections.

For each percent increase in the male portion of the population in a congressional district, voter turnout was estimated to decrease by 0.90 percent in the expanded model. Despite the large decrease, this estimate would result in a small change in voter turnout because the difference between the size of the male and female population in a congressional district is seldom larger than a few percent. However, the statistically significant negative impact a percentage increase in the male population of a congressional district has on voter turnout contradicts prior research by Downs (1957), among others, and suggests a change in family roles since prior research was conducted in the last half of the $20^{\text {th }}$ century. These findings also suggest the previously discussed effect the 2016 Presidential Candidates had on female voters, mobilizing them to vote, impacted the effect of the male population on voter turnout.

The most notable finding of this research is the discovery of a ballot fatigue point after 8.32 ballot initiatives are listed on the ballot. Tolbert, Grummel, and Smith (2001) find no ballot fatigue and O'Dell and Marks (2016) partially support this finding. However, O'Dell and Marks do not investigate the possibility of ballot fatigue for more than three ballot measures listed on a state ballot. Investigating only one through three ballot measures leads O'Dell and Marks to overlook a ballot fatigue point beyond eight ballot measures. This ballot fatigue point estimated in the research indicates that, on average, each additional ballot initiative begins to have a negative impact on voter turnout after 8.32 ballots.

While this research yields interesting results, the findings are limited by the data set and the uniquely polarizing nature of the 2016 Presidential Election. This research can benefit from conducting a similar analysis on other recent presidential elections. However, the results do have implications for registrars of voters and voter registration policies. A registrar of voters may be able to increase voter turnout by conducting voter registration drives in heavily populated minority areas in their district, if they exist, because minority populations turn out at lower rates than white voters do. Additionally, state legislatures may want to be more conscious of how many ballot initiatives are included on the ballot, because nine or more ballot measures will likely begin to have a negative effect on voter turnout rates.

## References

Ballotpedia (2016). "2016 Ballot Measures." Last modified 2016. Accessed March 26, 2019. https://ballotpedia. org/2016_ballot_measures.

Downs, Anthony (1957). An Economic Theory of Democracy. Nachdr. ed. Boston: Addison Wesley

Gerber, Alan S., Gregory A. Huber, Conor M. Dowling, David Doherty, and Nicole Schwartzberg (2009). "Using Battleground States as a Natural Experiment to Test Theories of Voting." Unpublished manuscript, American Political Science Association, Toronto, September 6, 2009.

Haas, Karen L. (2016a). "Official List of Members of the House of Representatives of the United States and Their Places of Residence One Hundred Fourteenth Congress." Last modified December 5, 2016. Accessed January 31, 2019. https://his-tory.house.gov/Congressional-Overview/ Profiles/114th/.

- (2016b). "Statistics of the Presidential and Congressional Election from Official Sources for the Election of November 8, 2016." Last modified February 22, 2017. Accessed January 30, 2019. http://clerk.house.gov/member_info/ electionInfo/2016/statistics2016.pdf.

Kahn, Chris (2016). "Trump Trails Clinton by 8 Points after Tape Scandal, Debate: Reuters/Ipsos Poll." Reuters. Last modified October 11, 2016. Accessed April 13, 2019. https://www.reuters.com/ article/us-usa-election-poll/trump-trails-clinton-by-8-points-after-tape-scandal-debate-reuters-ipsos-poll-idUSKCN12B2 PV .

O'Dell, Alexander, and Melanie Marks (2016). "What Impacts Voter Participation in Midterm Elections?" Unpublished manuscript, Longwood University, Farmville, VA, 2016.

Powell, G. Bingham, Jr. (1986). "American Voter Turnout in Comparative Perspective." The American Political Science Review 80 (1): 17-43.

Tam Cho, Wendy K., James G. Gimpel, and Joshua J. Dyck (2006). "Residential Concentration, Political Socialization, and Voter Turnout." The Journal of Politics 68 (1): 156-67.

Tenn, Steven (2007). "The Effect of Education on Voter Turnout." Political Analysis 15: 446-64.

Tolbert, Caroline J., John A. Grummel, and Daniel A. Smith (2001). "The Effects of Ballot Initiatives on Voter Turnout in the American States." American Politics Research 29 (6): 625-48.

United States Census Bureau (2016). "Electorate Profiles: Selected Characteristics of the Citizen, 18 and Older Population." United States Census Bureau. Last modified October 28, 2016. Accessed March 26, 2019. https://www.census. gov/data/tables/time-series/demo/votingand registration/electorate-profiles-2016. html.

United States Census Bureau (2017). "My Congressional District.". Last modified 2017. Accessed April 2, 2019. https:// www.census.gov/mycd.

Veracity Media (2018). "Voter Turnout." Last modified 2018. Accessed March 27, 2019. https://www.fairvote.org/voter_ turnout\#voter_turnout_101.

## SPECIAL ISSUE ARTICLES: Politics and Policy

Editor's Introduction
Jeff Gulati
Authoritarianism and Populism in American Politics
Michael Acampora
When P*ssy Grabs Back: An Examination of the Gender Gap in the 2016 Presidential Election
Katie Gilroy
Agenda Setting: The Barriers to Preventative Healthcare Issue Attention in the United States Congress
Jennifer Corso
Measuring the Effect of Demographic, Economic, and Political Factors on Voter Turnout in the 2016 Presidential Election
Ryan Amelio


[^0]:    * Professor of Global Studies, Bentley University and Associate Editor, Fusio. Corresponding email: jgulati@bentley.edu.

[^1]:    * Bentley University Class of 2017. Corresponding email: michaelacampora@me.com. I would like to thank my capstone advisor, Professor Jeff Gulati, for his support throughout this project.

[^2]:    * Corresponding email: katiegilroy4@gmail.com. I would like to thank my capstone advisor, Professor Juliet Gainsborough, for her support throughout this project.

[^3]:    * Corresponding email: jencorso20@gmail.com. This research was supported by United Technologies Corporation. I thank Professor Rob DeLeo for his dedication and expert guidance. I thank Jonathan Whittinghill for his assistance with the statistical analysis. I also express my gratitude to Professor Aaron Jackson, Professor Jeff Gulati, and the Fusio reviewers for their useful critiques.

[^4]:    ${ }^{1}$ The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

[^5]:    ${ }^{2}$ Note: This question is consistent for all years of data series except for 1996. The question recorded for 1996 is "Asked of re-contacted registered voters: Now that Bill Clinton has been reelected president, what do you feel should be the top priority for the Clinton administration in his second term?"

[^6]:    ${ }^{3}$ Prior to 1997 , the number of fitness centers is recorded under SIC code 7991 Physical Fitness Facilities.

[^7]:    ${ }^{4}$ To improve interpretability the number of fitness centers is divided by 100 , so a one-unit difference on the new variable represents a difference of 100 fitness centers operating in the US, and then centered at its mean.

[^8]:    * Corresponding email: ryamelio@gmail.com. I would like to thank my advisor, Professor Scott J. Callan, for his guidance through the research process. I also wish to thank the Greenwich Registrar of Voters, Fred DeCaro III, for his mentorship in electoral processes.

[^9]:    ${ }^{1}$ A strong relationship between education and income is expected because a higher level of education typically results in a higher income. Moreover, there is the possibility of multicollinearity between education and income, and the model will be refined as needed.

[^10]:    ${ }^{2}$ The excluded congressional districts lacked House contests, either being without a candidate from each major political party, consisting of a major party candidate versus a minor party candidate, or having two candidates from the same major party depending on state primary laws. The only exceptions were the contests in the congressional districts in Louisiana, which were excluded because the final vote count was of a series of runoff elections, rather than a single winner-take-all election held throughout the other 49 states in 2016.

[^11]:    ${ }^{3}$ The OLS technique is not without problems, so potential violations of OLS assumptions will be investigated, and if discovered, corrective procedures will be utilized.

[^12]:    ${ }^{4}$ Using the Variance Inflation Factor (VIF) method, correlation between the independent variables was assessed and there were no two variables with alarmingly high correlation. The mean VIF was found to be 1.85 , which is acceptable and lessens the concern for severe multicollinearity. The variables measuring the percent of the population in a congressional district with a college degree and the population's median household income were the most highly correlated (correlation $=0.7891$ ), but the correlation was still not severe enough to warrant corrective procedures.

[^13]:    ${ }^{5}$ Given that 2014 was not a presidential election year, O'Dell and Marks did not directly measure the impact of the state-level margin of victory in presidential races on voter turnout.

