CLOCKS & CLOUDS

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"ALL CLOUDS ARE CLOCKS- EVEN THE MOST CLOUDY OF CLOUDS."
-KARL POPPER

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"Research is never done in a vacuum."

This year, Clocks & Clouds has entered its second decade of publication. By continuing on the foundation built in the first ten years of this publication, we are proud that we had a record number of submissions and staff applications. The journal's goal is to showcase the best undergraduate research, which can contribute to intellectual dialogue, the papers that can find the clocks among the clouds; the rational among the disorderly. The quality of research and writing grows each year, and this year, we are highlighting seven impressive pieces of research.

Adam Billen and Chris Berning explore the connection between family structures and election behavior, and Katja Matter explores how political socialization occurs online for young people. Cassidy Stoneback examines how formerly incarcerated women are impacted by collateral consequence laws. Tyler Godding looks to see if temporary spending assistance has a genuine impact on poverty rates, and Alice Khakajian looks at the impact of preventative and non-preventative Medicare states. The relationship between fossil fuel spending and climate action in Congress is explored by Magnolia Mead, and the role of Celtic mythology in the Irish Nationalist Movement is explained by Melina Reilly.

Research is never done in a vacuum; creating this journal would be impossible without the various support networks available. We would like to thank our faculty advisors, Professor Robert Adcock and Professor Kimberly Cowell-Meyers, for seeing the value of undergraduate work in the academic space, and the School of Public Affairs and School of International Service at American University for creating and maintaining a platform for students to share their hard work. Lastly, we would like to thank every single student involved in this process, between the authors and reviewers and everyone in between; this journal is, first and foremost, an undergraduate piece, and this publication would not be possible without students taking time out of their days to support other students in sharing their brightest ideas. Clocks & Clouds is built on the idea that undergraduate students have ideas worth considering. Join us in sharing what these students have to say.

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PARTICIPATION IN ONLINE SPACES
AND INTEREST IN POLITICS FOR YOUTH

Katja Matter

Abstract

As the internet becomes more like its own civil society and political socialization increasingly occurs online, this phenomenon has not yet been thoroughly investigated. Youth spend a lot of time online, and incidental exposure to new ideas and online communities can mimic non-online connections. Finding a new pathway for the development of political interest using the internet could provide new avenues for reducing the political alienation felt among youth. However, since so much political socialization occurs incidentally or through the formation of connections to society, political socialization on the internet also has the potential to occur through non-political networks. The purpose of this paper is to investigate the way that non-political internet community participation impacts youth interest in politics. This paper builds on previous research done on political interest and the internet, while expanding on these areas and filling a research gap that exists for non-political internet community-building. This paper uses data from the Youth Participatory Politics Survey, and a chi-square test of significance to look at these data to see if there is a relationship between non-political digital participation and interest in politics for youth. This research found a significant but weak relationship between non-political online participation and interest in politics for youth, indicating that it is one of many complex factors that influence political socialization. Further research should be done to identify how and why political socialization happens online, and how to make youth more interested in politics. The basis for a politically aware populace is a connected populace, and while the internet does certainly have the power to disconnect, it also has the power to bring people together.

Keywords: political socialization, youth, Internet, political community, social media, political interest, political alienation, social development

Purpose and Overview

The internet, once simply a tool for sharing information, has become an extension of society with communities, subcultures, and opportunities. The internet could be considered a civil society, and the interactions that take place there could have the power to replicate interactions in the real world (Kittilson and Dalton, 2008). Usage of the internet, even in non-political spaces, creates encounters with new ideas and people which could facilitate interest in politics. Engagement with the internet in online spaces could be a general tool to reduce political alienation among youth and promote an interest in politics. Youth political interest is hard to measure because youth political participation tends to be low and youth have different drivers of interest in politics than other age groups. Furthermore, widespread internet usage among youth impacts these drivers of interest in ways that have not yet been thoroughly investigated. While there is a small amount of research on the way youth use social media for political activism, existing literature seems to neglect the fact that the internet is primarily used for non-political means. The strongest disconnect in scholarship seems to be the way the internet is studied as a mechanism for social and political engagement rather than as its own civil society where various types of engagement take place. Furthermore, most research on political engagement, even when specifically targeting its relationship with the internet, doesn't focus on youth.

This paper challenges existing research which sees the internet as a source of disconnection, rather than connection. If digital communities in specifically non-political spaces can foster political interest, that could be an important sign that the internet could be a tool to reduce alienation for youth. It seems to be a question of *how* the internet is used, rather than of internet use itself. If socialization and connection in non-political online spaces fosters civic community, especially for increasingly digitally connected youth, there is a gap in the literature about how this kind of participation relates to reported interest in politics. Rather than jumping to political participation, on which there is some research, this paper will focus on the motivators behind political participation and the digital underpinnings of initial interest in politics for youth. The paper seeks to investigate the question: does youth participation in non-political online spaces increase their interest in politics?

Most research has used survey data to analyze reported usage of the internet and interest in politics. Survey data is a very appropriate way to gauge internet usage and reported interests in politics on a specific level, because it helps measure the representativeness of individual attitudes. This study examines the relationship between internet participation and interest in politics for youth using survey data. "Youth" measures the ages between 15-27. This study looks at how often someone spends time engaging in online forums and discussions rather than simply how often someone accesses the internet because engagement reflects an active role in online spaces. This study hypothesizes that, in comparing youth, those with a high level of participation in non-political online spaces will be more likely to report a high level of interest in politics than those with a low level of participation in non-political online spaces.

This study uses data from the Youth Participatory Politics Survey Project (2013) to measure the variables. The survey includes a variety of questions on internet usage, political participation, and demographic information. In the questions about internet usage and participation in online spaces, there are specific questions about the focus of these online spaces. The independent variable is how often someone participates in online forums/discussions related to their interests, and the dependent variable is interest in politics. This study also performed controlled tests, controlling for whether this online participation is political or non-political. In order to test the

hypothesis, this study used a chi-squared test of significance. This study found a significant, positive relationship between online forum participation and interest in politics for youth, indicating that the idea that the internet is its own civil society which can foster political socialization has merit. When controlling for whether this forum participation is political or not, this study additionally found that while non-political discussion seems to foster interest in politics, explicitly political forums may lead youth to report lower levels of interest in politics.

Literature Review
Drivers of Interest in Politics

It is important to research political interests because it reflects attitudes that could be turned into political participation but isn't limited to the material constraints that encourage or discourage people from voting or engaging with politics directly in other ways. Political interest is a very under-researched dependent variable in political science and there is very little substantial research published on political interest. One study which reflects this research is made by Markus Prior (2019), who investigated drivers of political interest using longitudinal household data. He found that the highest predictors for high political interest were education and parental influence. These data, however, were collected exclusively from participants above the age of 18, which justifies increased investigation into youth political interest. Notably, none of these data accounted for internet usage, and instead accounted for demographic variables. When examining age, Prior found that reported political interest tends to increase over time in early adulthood before stabilizing and remaining constant. This indicates that there is a key time period where political interest can increase. Prior also found that political interest is a predictor for political engagement, which makes the research gap for political interest even more important to address.

A separate 2015 study found that political interest can increase among youth when there are social rewards present (Robison, 2015). Because this study focuses on youth, it aligns with Prior's findings about when political interest has the capacity to increase. The study finds that social pressure is a key mechanism for motivating political interest, which is most deeply tied to perceptions of social bonding and avoiding social ostracization. This social approach is expanded upon by Settle et al. (2010) which examines peer social networks among adolescents as a mode of political socialization and predictor of adult political engagement. The study focuses on social networks and social connectedness as they exist outside of the internet, but the insight could provide a compelling parallel for online social communities. Social connectedness is important because of its role in identity cohesion, perception of one's membership in society, and is crucial in developing trust (Settle et al., 2010). The study finds that feeling connected to others in the community is correlated with higher levels of civic and political engagement. This connectedness is shaped by socialization and social networks throughout adolescence. Social integration in digital spaces is an important expansion of this research and could conceivably be an effective predictor of perceived social cohesion and community belonging.

The Internet and Politics

The internet is a space that is constantly evolving — the internet itself is less than fifty years old, but did not become widely used until the 1990s. It is important to recognize that the way the internet exists today is unrecognizably different than it was at its inception. Because of this, much of the existing literature on usage of the internet measures the internet as a sort of blunt

tool, flattening the variable into how often the internet is used, or whether individuals play video games. A 2018 study published by the Pew Research Center based on survey data is a good example of this, finding that 45% of teens are online "Almost Constantly," but the lack of detail in the questions demonstrates an important gap in the research. The questions gauge *whether* youth are online rather than *how* youth are online. Much of the findings are also more concerned with demographic differences in participant responses rather than investigating the way the internet is being used by youth in detail (Anderson and Jiang 2018). There is very little data on how the internet is used, and most of it has been collected very recently.

The internet's influence on politics is something that has been documented and researched in recent years, but whether that influence is positive or negative remains debated. On one hand, the internet offers unprecedented access to methods of political engagement, and even expands the political landscape by allowing the possibility of online voting, online voter registration, and digital campaigns (Booth et al., 2020). On the other hand, the internet can be a pipeline for extreme radicalization, disinformation, and the creation of echo chambers (Schaub and Morisi, 2018). A 2007 study tested the impact of the internet on political activism by using reported data on how often people access the internet and testing for correlation with four categories of political engagement: voting, campaign oriented engagement, cause oriented engagement, and civic oriented engagement (Norris, 2007). The study found that those who use the internet regularly have increased participation in all four of these categories when compared to their counterparts who do not use the internet regularly. There is demonstrable positive political impact associated with internet usage, but the study does not stratify for types of internet usage or for age.

A 2018 study that investigated the impact of the internet on voter participation in local U.K. elections found something very different. The study concluded that entertainment on the internet and digital media has replaced a lot of traditional media which limits exposure to current events, news, and political content (Gavazza et al. 2018). This was found to be directly correlated with lower voter turnout, especially among young people and less educated people. The study used a dataset containing the number of broadband subscribers (measuring general internet usage on a population level) and measuring that against election data. These findings are very interesting and lend credence to the idea that the way the internet is used is more important than the availability of the internet. However, it is also important to consider that the Norris study was done over a decade prior to the Gavazza et al. study, so changes in the internet itself could also be a factor in the different results each study found. In a 2018 study, Schaub and Morisi (2018) implicated the expansion of access to the internet (once again measuring broadband expansion) in the rise of populism across Europe using data from Italy and Germany. The study found that areas with more broadband access had a much higher propensity to vote for populist parties than areas with less broadband access. This study does not stratify for youth and does not control for kinds of internet usage.

Youth Political Engagement

There is a general consensus within the literature that older people are more politically engaged than young people, and that young people tend to vote less and have a higher rate of political alienation. A 2007 study coming out of Belgium found several key reasons why youth have lower levels of political engagement than their older counterparts. The research identified areas of social investment that fuel political engagement that young people don't have such as

home ownership, children, or stable residence (Quintelier, 2007). Young people also tend to favor non-traditional forms of political engagement such as protest and local community involvement. These forms of political engagement don't tend to be included in research into political participation, which tends to focus on voter turnout or party membership. Young people's preference for new forms of political participation aligns with an increasingly digital form of engagement which is also often neglected in research into political engagement.

Connection to the community is a very important factor for youth. Derksen et al. (2017) find this to be a primary reason for low youth voter turnout, a measurement of political engagement. The study, published by the London School of Economics, analyzes barriers to voting and potential causes of political alienation which risks disincentivizing young people from participating in politics.

When young people feel a lack of attachment to the community around them, they are less likely to report an interest in politics or participate in the electoral system. Kimberlee (2002) investigated different explanations for why youth voter participation is so low and reached a similar conclusion that community belonging is a key factor in political participation. The research indicates that social changes inhibit young people from feeling connected with their communities. Traditional indicators of belonging like class structure and family are increasingly pushed to the side, creating a disconnect that makes youth less likely to seek out involvement in political parties.

Youth, Internet, and Politics

Many new kinds of interactions for youth now take place digitally, and research suggests that the result is increasing social connection. Winstone et al. (2021) find that youth internet usage often supplements and aids face-to-face interaction, and that intentional community building fosters social connectedness amongst youth. Although this research doesn't examine how this connectedness interacts with political interest, the findings suggest a positive relationship between certain forms of internet access and social community building for youth. Jiang (2018) reaches similar conclusions, finding that even teens who rated themselves as accessing the internet "Almost Constantly," still socialize face-to-face at a similar rate to their less online peers. This not only suggests that there is not a tradeoff between online and offline social interaction, but that internet engagement can be an additional form of community engagement that solidifies identity building and relationship formation for youth.

There is far less literature on the nexus of youth, the internet, and politics. Still, Heiss et al. (2019) examine this intersection by analyzing youth usage of social networking sites and digital encounters with politics. Notably, the study differentiates between political and non-political usage of social networking sites, but isn't looking to investigate the way non-political internet usage can affect politics. Rather,— the project intends to measure that non-political internet usage specifically, alongside reported incidental exposure to political media. The study concludes that there are both positive and negative impacts of youth internet usage on political attitudes, depending on whether youth seek out political content on the internet. An important factor neglected in this study is the way specific online communities, as opposed to general social media, have the potential to foster social community and connectedness to reduce political alienation. A 2020 study conducted by Tufts University focuses on intentional political usage of the internet among youth, finding through poll data that youth feel more informed and involved when they use the internet for political ends (Booth et al. 2020).

Study Design

Theory and Expectations

There is research on intentional political community, but the way youth engage in non-political civil society digitally remains a persistent gap in the research. Thus, this project will investigate specific usage of digital space as community building and a way to increase social connectivity. This study hypothesizes that, in comparing youth, those with a high level of participation in non-political online spaces will be more likely to report a high level of interest in politics than those with a low level of participation in online spaces. The null hypothesis is that, in comparing youth, those with a high level of participation in non-political online spaces will not be more likely to report a high level of interest in politics than those with a low level of participation in non-political online spaces. Social connectivity and social networks are important parts of political socialization which in turn shapes interest in politics. Given how important adolescence is for shaping political attitudes, controlling these data to focus on online community building as a predictor for youth political interest may point to new ways to foster political socialization aiming at increasing political participation among youth.

There are many complex factors underlying levels of political interest in youth, but findings within the literature support the hypothesis that non-political online communities can foster political interest for youth. Existing research suggests that there is a key period of time where people develop political interest: late teens and early adulthood (Prior 2019, Robison 2015). This indicates that there are variables youth encounter that influence their levels of political interest, such as entering college, getting a job, and living outside of parental supervision. These new independent experiences prime youth for personal psychological development and endow their socialization with new importance. Besides the key period of time in which people's political interest can shift, there is also research on how and why people develop political interest which lends credence to the hypothesis. Research finds that reported feelings of connectedness to a community and perceptions of social belonging are correlated with increased political interest (Robison 2015, Settle et al. 2010, Quintelier 2007, Derksen et al. 2017). Social belonging and community are crucial factors in shaping political interest: when people feel as though they are part of a community, they care more about what happens to that community. People want to feel as though they are part of a group, and youth in particular are inclined to group activity as a survival strategy (Settle et al., 2010). Furthermore, social connectedness creates networks for political socialization to happen naturally and creates social investment in society for youth.

This study will test whether this positive relationship between social community and political interest among youth carries over to online spaces Some studies have concluded that online socialization can replicate the effects of in-person socialization (Kittilson and Dalton 2008, Winstone et al. 2002). This means that there is a strong argument for online interaction and community building increasing political interest among youth. Furthermore, there are emerging barriers to youth connecting to their communities in-person. Young people are increasingly less likely to be able to buy a home, have a family, pursue higher education, or make more money than their parents (Kimberlee 2002, Derksen et al. 2017, Quintelier 2007, Marcus 2022). These are all factors that make people feel more invested in political change, and when they decrease, people feel less connected to their communities and to politics. This suggests that using the internet may be able to aid youth in connecting to their communities in an increasingly alienating political environment. Using the internet correlates with higher levels of political engagement (Norris 2007, Booth et al. 2020, Heiss et al. 2019). As social and political worlds become

digitally accessible, online community building seems like it has the ability to increase political interest among youth.

This study will examine political socialization of youth as it happens online through social connectedness and community. Online spaces, as part of an online civil society, may provide the same kind of social interaction and communal connectedness that correlates with increased political interest for youth in non-online spaces. If political socialization can happen through systems of social rewards and incidental socialization, then similar effects may be observed through the internet.

When youth join online communities, they are encountering other people their age who they share interests with, fostering value-building and creating mechanisms of social rewards and punishments. By becoming part of this online civil society, not only do youth open themselves up to new pathways for political socialization by speaking to people with different experiences, but they could become invested in a community of people. Without explicitly seeking out politics online, youth participating in online communities are exposed to social networks and opportunities for involvement which could spur interest in politics for youth who would otherwise care less about politics.

Operationalization and Measurement of Concepts

This study will examine data on youth internet behavior and interest in politics. For the purposes of this study, "youth" will be defined as someone aged 15-27, because it encompasses late teenage years and early adulthood. The data this study will use comes from the Youth Participatory Politics Survey, 2013. The Youth Participatory Politics Survey collected data on 2,920 youth respondents, and the sample is designed to be representative of the United States. They selected respondents by using a probability-based web panel (KnowledgePanel) supplemented with the U.S. Postal Service Delivery Sequence File. Excluding respondents who did not answer Q17 (the question related to the independent variable) or Q150 (the question related to the dependent variable), there are 2,343 valid cases for this study to examine. The codebook includes a weight variable to make the data representative of the United States as a whole, so this will also be used when conducting tests. While the YPP study only covers the US in its data, the study still provides unique insights into youth socialization in the digital world. Importantly, this limitation highlights the need for more global research into the phenomenon.

The independent variable is how often someone participates in online forums/discussions related to their non-political interests. This is an ordinal variable because it measures the data across ordered categories. This study will use Q17 on the survey for the independent variable ("Thinking about your major interests, how often do you typically do the following? Participate in an online forum or group related to your interests") with responses being "Never" (coded as 1), "Less than Once/Month" (coded as 2), "At Least Once/Month" (coded as 3), "At Least Once/Week (coded as 4), and "Daily" (coded as 5). This is an effective way to operationalize the independent variable because it measures time spent in online communities on a categorical scale. Interest related discussion and networks form the basis for in-person social networks for youth (Settle et al. 2010) and are a key part of identity cohesion.

Q26 ("What interests are you most involved with online?") breaks these data down by interest, so this study will control for discussions explicitly related to politics (coded as 11). In order to control for political vs. non-political interests, the non-political interests listed under Q26 will be recorded as 0, and the political response will be recorded as 1.

The dependent variable is 'level of interest in politics'. This is represented by Q150 on the Youth Participatory Politics Survey ("I am interested in political issues. Do you…") with responses, 'Strongly disagree' (1), 'Disagree' (coded 2), 'Agree' (coded 3), and 'Strongly Agree' (coded 4). This is also an ordinal variable, because it groups qualitative data into ordered categories. This is an effective way to operationalize the dependent variable because it is reported interest in politics, broken down into levels which can reflect nuances.

This study hypothesizes that in comparing youth, those with a high level of participation in online spaces will be more likely to report a high level of interest in politics than those with a low level of participation in online spaces. In order to support the hypothesis, youth who report higher levels of participation in non-political online spaces would be more likely to report "Interested in Politics" than youth who report lower levels of participation in non-political online spaces. This would suggest a relationship between the variables.

Research Design

This study will test the hypothesis by performing a chi-squared test to determine if there is a significant relationship between participation in online discussions and political interest, controlling for political discussion. A chi-squared test was chosen because both variables are ordinal. If the probability of obtaining the test statistic by chance is less than 5%, then the null hypothesis will be rejected. If the chi-squared test indicates that there is a relationship, that would support the idea that non-political online community participation could lead to higher levels of political interest. If the hypothesis were to be supported by the data, that would suggest a need for further research into this relationship. Furthermore, it would add to the literature that suggests an online civil society can be a pathway for many of the same ends as an offline civil society. If youth interest in politics has a possible causal relationship with this sort of online community building, it would open doors for new means of reducing political alienation among youth. Youth political interest should be higher, because that would lead to more participation, (Prior, 2019) creating political institutions that are more representative of the people and their needs.

This analysis uses ordinal level variables to measure the relationship between online discussion participation and interest in politics for youth. The independent variable is how often someone participates in online forums/discussions, which is operationalized as a scale from "Never" to "Daily" (coded as 1 to 5). This measures the level of participation on an ordinal level. The dependent variable is how interested in politics someone is, which is operationalized from 1 to 4, representing Strongly Disagree through Strongly Agree. This measures interest in politics on an ordinal level. The control variable is whether reported online discussion participation is political or not. This is a variable where political discussion participation is reported as Yes (coded 1) and non-political discussion participation is reported as No (coded 0). This is a nominal variable because there are only two categories. The data is weighted through the provided weight variable in order to make the data representative.

Analysis and Conclusion
Results and Analysis

The first tests conducted were descriptive statistics on the variables to get a sense of the base level of interest in politics that youth reported, and how often they participate in online forums and discussions. The median response is '2', which corresponds with the "Less Than/Once a

Month" response. There is a decent amount of variation in these responses, which has skewed the mean away from the median. The median represents the most selected response, signifying that it is common to have at least a low level of involvement in online discussion forums. The median response for interest in politics is '2', which corresponds with the "Disagree" response. Youth often report lower levels of interest in politics from a base level- which is notable for this analysis that seeks to understand a relationship that may heighten interest in politics. The median is '0' for responses on whether participation is political or not, indicating that the most common response to whether someone participates in political discussions online is "No." This data indicates that most respondents use the internet to participate in non-political, rather than political discussions, and thus too demonstrating the importance of political socialization through non-political spaces: most youth do not seek out political discussion on the internet. Political socialization may be occurring because online community participation influences perceptions of group membership, increasing interest in community problems.

The next tests measured the level of correlation and statistical significance between online participation and political interest. This was done using a chi-squared test because the variables are ordinal and the control variable is nominal. To test significance, the independent variable was first run against the dependent variable, then the control variable against the dependent. Finally, a controlled test of the independent variable was run against the dependent variable, where level of online forum/discussion participation was tested against levels of interest in politics, controlling for whether that discussion participation was political or not. The table below, Table 1, displays the results of the chi-squared tests of the independent variable on the dependent variable, the control variable on the dependent variable, and the independent variable on the dependent variable for each value of the control.

Table 1: Results of Chi-Squared Tests of Interest in Politics by Level of Participation in Online Spaces, Controlling for Participation in Online political Spaces

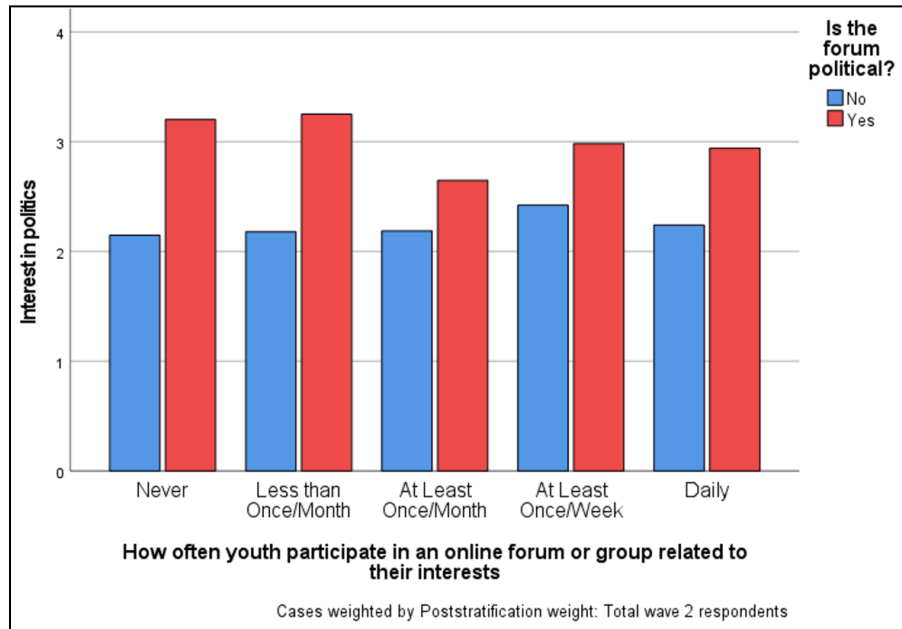|	Participation in online spaces on interest in politics	Participation in political online spaces on interest in politics	Participation in online spaces on interest in politics by participation in political online spaces	Participation in online spaces on interest in politics by participation in non-political online spaces
Chi-Square	41.34	311.13	35.76	43.44
p-value	<.001	<.001	<.001	<.001
Somers' d	.07	.23	-.13	.07
N	2289	2300	248	2041

As shown in Table 1 above, the relationships between these variables are all significant, since the p-value is less than 0.05 in all cross-tabulations. Without controlling for whether the interaction is political or not, level of participation in online spaces on the level of interest in politics has a p-value of <.001, which indicates a high level of significance. For the uncontrolled

test, the Somers' d value is .07, indicating a weak positive relationship. This means that non-political socialization online increases political interest by 7%. The relationship is significant, and the cross-tabulation results demonstrate increasing values of interest in politics as participation in online spaces increases. These results indicate that online participation has an effect on interest in politics without controlling for whether that participation is political or not.

With the addition of the control variable, we find that non-political participation in online spaces also has a significant relationship with level of interest in politics. There is a positive, significant relationship. The relationship found in the controlled test, therefore, may be weak, but is still significant. The value indicates that as youth report higher levels of participation in non-political online spaces, they are more likely to report higher levels of interest in politics. This Somers' d value also explains that compared with how well one can predict youth interest in politics without knowing their level of participation in non-political online spaces, knowledge of participation in non-political online spaces improves the prediction by 7%. Thus, one can reject the null hypothesis that in comparing youth, those with a high level of participation in non-political online spaces will not be more likely to report a high level of interest in politics than those with a low level of participation in non-political online spaces.

In rejecting the null hypothesis, one can accept the alternative hypothesis examined in this study: that in comparing youth, those with a high level of participation in online spaces will be more likely to report a high level of interest in politics than those with a low level of participation in online spaces. However, the alternative hypothesis cannot be accepted for those who participate in political spaces online. Each value of the control has a different direction within the relationship as demonstrated by the Somers' d value. For those who participate in online political spaces, the Somers' d value is -.13, indicating a negative, weak relationship. This indicates that as youth report higher levels of participation in political online spaces, they are more likely to report lower levels of interest in politics. This may reflect the emergence of echo chambers or political burnout. Without looking at individual values of the control, the relationship between political discussion and interest in politics is also significant with a p-value of <.001 and has a Somers' d value of .23. When looking at individual values of the control — whether online participation is or is not political — the relationship between the control and the independent variable's effect on the dependent variable can be examined. The control variable is specificatory, indicating that there is an interaction relationship present because the strength and direction of the effect of the independent variable depends on the value of the control. The figure below, 'Graph 1', displays this relationship visually. This graph demonstrates an increase in political interest for those who report more online participation, but only where that participation is non-political. When that participation is political, the opposite is observed: as participation increases, interest in politics decreases. The trend is not extreme, but it is observable, and visually represents the trends in the cross-tabulation.

Graph 1: Clustered bar chart displaying the effect of online forum participation on interest in politics, controlled by whether that forum is political or not.

While those participating in political forums have a higher baseline interest in politics, the relationship between their interest and their participation is negative, whereas participation in non-political forums has a positive relationship with political interest. This means that the independent variable, participation in online forums, only has a positive effect if those forums are non-political.

Conclusion

These tests provide an interesting insight into the way that political socialization occurs, and adds to the literature surrounding the internet as its own civil society. The positive, significant relationship between participation in non-political forums and political interest aligns with the previous analysis in this paper about why these two variables may be correlated. The data suggests that youth who spend more time online socializing in non-political forums will experience socialization that increases their interest in politics. The data also suggests that youth who spend more time online socializing in political forums will experience socialization that decreases their interest in politics. Non-political online communities may support the sense of community and civic engagement that spurs interest in politics better than political communities. While youth may find community in online political forums, the strength of these connections may not be as personal, and the communities found may not be local enough to spur interest in local matters. More research should be done about why this is and the ways that political spaces differ from non-political spaces online in terms of their communities.

While this study is specifically examining the way political socialization occurs through non-political means, the observed negative relationship between political forum participation and interest in politics may still seem a bit counter-intuitive. However, this does align with previous

findings in the literature surrounding political echo chambers, which suggest that some explicitly political online spaces can become sources of radicalization. This can discourage political interest and political participation, which is supported by some researchers, who implicate the internet in both the rise of radicalization and the decrease in political interest among youth (Schaub and Morisi 2018, Gavazza et al. 2018). However, other research within the literature has found that using the internet for political means can galvanize political interest (Booth et al. 2020, Heiss et al. 2019). The point of divergence may be about the platforms on which these interactions occur. Forums and discussions necessitate a kind of online community, which is what this study is investigating, however, these previous studies don't test for online communities. Furthermore, this conflict within the literature also points to the limits of this study itself. It's hard to put something as abstract as internet socialization and community-building into testable variables. The internet is also constantly changing, and the dataset is from 2013, so more research should be done to determine whether this relationship has changed as new forms of social interaction have become more popular online.

While the significance found within these relationships is very high, the strength of the relationships is still quite low. This is because, as to be expected, there are many different causes of political socialization. The idea that many factors shape political socialization is widely accepted within the literature, but many of these factors are not fully yet understood because of how complicated the process is (Robison 2015, Settle et al. 2010, Prior 2019). The somewhat weak relationship observed here is in line with this previous research because it indicates that online non-political discussion interaction is one of many explanatory variables. However, the research done here does indicate that, for youth, participating in online non-political forums can increase political interest. This also opens the door for more research to be conducted about the way that political socialization can happen online, where other avenues of online socialization can be studied. Furthermore, this research suggests that youth could become more engaged and interested in politics by becoming more active in certain online communities. This is an important application of this research because it suggests ways to increase youth interest in politics moving forward. Not only can youth create their own communities and gather to discuss their interests in a way that furthers positive socialization and interest in politics, but it also indicates that campaigns attempting to increase youth's interest in politics could also utilize non-political means of bringing youth together in communities to increase interest in politics.

This study supports the idea that the internet can be a means of bringing people together, as online socialization increased interest in politics, reflecting group socialization and identification. This research also fills the gap in the literature around non-political internet communities and the effect this has on political interest. This study furthers the research done about how the internet can replicate many in-person interactions (Kittilson and Dalton 2008) and supports further research into the internet as a civil society, particularly as it pertains to youth. An additional component that could come out of this research is looking into how different modes of political socialization may manifest differently — in essence, what is it that transforms political interest into political engagement? While Prior (2019) found that political interest often translates into political engagement, these forms of engagement can look very different in the digital age. Does political interest, when created online, manifest predominantly in online political engagement as well? Looking to the future, the internet is constantly providing new avenues to communicate, and subsequently new avenues to research. More work should be done to increase youth political interest and looking online may be a good place to start.

Appendix

Statistics

		I am interested in political issues. Do you…	(Political) What interests are you most involved with online?	(Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?
N	Valid	2300	2343	2318
	Missing	43	0	25
Mean		2.30	.11	2.34
Median		2.00	.00	2.00
Mode		2	0	1
Std. Deviation		.859	.309	1.409

Independent on Dependent Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	41.340[a]	12	<.001
Likelihood Ratio	43.254	12	<.001
Linear-by-Linear Association	14.134	1	<.001
N of Valid Cases	2289		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.90.

Independent on Dependent Directional Measures

			Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Ordinal by Ordinal	Somers' d	Symmetric	.071	.018	3.977	<.001
		I am interested in political issues. Do you... Dependent	.068	.017	3.977	<.001

		(Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following? Dependent	.074	.019	3.977	<.001

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Control on Dependent Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	311.133ᵃ	3	<.001
Likelihood Ratio	250.331	3	<.001
Linear-by-Linear Association	219.688	1	<.001
N of Valid Cases	2300		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.39.

Control on Dependent Directional Measures

			Value	Asymptotic Standard Errorᵃ	Approximate Tᵇ	Approximate Significance
Ordinal by Ordinal	Somers' d	Symmetric	.230	.015	12.606	<.001
		I am interested in political issues. Do you... Dependent	.522	.031	12.606	<.001
		(Political) What interests are you most involved with online? Dependent	.147	.012	12.606	<.001

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

*I am interested in political issues. Do you... * (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following? * (Political) What interests are you most involved with online? Crosstabulation*

				(Participate in an online forum or group related to your interests.) Thinking about your major interests, how often do you typically do the following?					Total
(Political) What interests are you most involved with online?				Never	Less than Once/ Month	At Least Once/ Month	At Least Once/ Week	Daily	
No	I am interested in political issues. Do you...	Strongly disagree	Count	211	82	63	31	44	431
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	24.3%	20.7%	20.6%	12.3%	20.2%	21.1%
		Disagree	Count	360	166	134	103	84	847
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	41.5%	41.9%	43.8%	40.7%	38.5%	41.5%
		Agree	Count	255	144	97	100	84	680
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	29.4%	36.4%	31.7%	39.5%	38.5%	33.3%
		Strongly agree	Count	42	4	12	19	6	83

			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	4.8%	1.0%	3.9%	7.5%	2.8%	4.1%
	Total		Count	868	396	306	253	218	2041
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Yes	I am interested in political issues. Do you...	Strongly disagree	Count	5	1	3	1	6	16
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	7.2%	1.8%	7.9%	2.4%	14.0%	6.5%
		Disagree	Count	5	5	12	5	3	30
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	7.2%	8.8%	31.6%	12.2%	7.0%	12.1%
		Agree	Count	31	30	18	29	21	129
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	44.9%	52.6%	47.4%	70.7%	48.8%	52.0%
		Strongly agree	Count	28	21	5	6	13	73
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	40.6%	36.8%	13.2%	14.6%	30.2%	29.4%
	Total		Count	69	57	38	41	43	248

			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	I am interested in political issues. Do you...	Strongly disagree	Count	216	83	66	32	50	447
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	23.1%	18.3%	19.2%	10.9%	19.2%	19.5%
		Disagree	Count	365	171	146	108	87	877
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	39.0%	37.7%	42.4%	36.7%	33.3%	38.3%
		Agree	Count	286	174	115	129	105	809
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	30.5%	38.4%	33.4%	43.9%	40.2%	35.3%
		Strongly agree	Count	70	25	17	25	19	156
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	7.5%	5.5%	4.9%	8.5%	7.3%	6.8%
	Total		Count	937	453	344	294	261	2289
			% within (Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Independent on Dependent with Control Chi-Square Tests

(Political) What interests are you most involved with online?		Value	df	Asymptotic Significance (2-sided)
No	Pearson Chi-Square	43.448[b]	12	<.001
	Likelihood Ratio	47.363	12	<.001
	Linear-by-Linear Association	12.030	1	<.001
	N of Valid Cases	2041		
Yes	Pearson Chi-Square	35.760[c]	12	<.001
	Likelihood Ratio	33.643	12	<.001
	Linear-by-Linear Association	4.958	1	.026
	N of Valid Cases	248		
Total	Pearson Chi-Square	41.469[a]	12	<.001
	Likelihood Ratio	43.261	12	<.001
	Linear-by-Linear Association	14.097	1	<.001
	N of Valid Cases	2289		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.79.
b. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.87.
c. 7 cells (35.0%) have expected count less than 5. The minimum expected count is 2.45.

Independent on Dependent with Control Directional Measures

(Political) What interests are you most involved with online?				Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
No	Ordinal by Ordinal	Somers' d	Symmetric	.068	.019	3.577	<.001
			I am interested in political issues. Do you... Dependent	.065	.018	3.577	<.001
			(Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following? Dependent	.071	.020	3.577	<.001
Yes	Ordinal by Ordinal	Somers' d	Symmetric	-.131	.055	-2.384	.017
			I am interested in political issues. Do you... Dependent	-.118	.049	-2.384	.017

				(Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following? Dependent	-.149	.062	-2.384	.017
Tot al	Ordinal by Ordinal	Somers' d	Symmetric	.071	.018	3.987	<.001
			I am interested in political issues. Do you... Dependent	.069	.017	3.987	<.001
			(Participate in an online forum or group related to your interests.) Thinking about your major interests, how often you typically do the following? Dependent	.074	.019	3.987	<.001

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

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FOSSIL FUEL MONEY AND THE FATE OF CLIMATE ACTION IN CONGRESS

Magnolia Mead

Abstract

As the climate crisis worsens, environmental leaders have attempted to pass climate legislation in the United States (US) Congress to completely decarbonize the economy and stop greenhouse gas emissions. However, lawmakers in the US have yet to take sufficient action to prevent climate change. One explanation for the failure of climate legislation in Congress is the influence of fossil fuel donations on members of Congress. This research finds that members of Congress in the House of Representatives who receive more donations from the fossil fuel industry are less likely to cosponsor environmental justice legislation. It also finds that there is no relationship between fossil fuel donations to members and their support for environmental justice legislation in more public floor votes. These relationships are analyzed using correlation and regression tests using data on fossil fuel donations to members of the 117th Congress during the 2020 campaign cycle, members' voting behavior on environmental issues, and members' cosponsoring of Green New Deal legislation. The results indicate that although members' votes are not being affected significantly, fossil fuel finance is influencing climate legislation in Congress behind the scenes and should be further investigated.

Keywords: environmental justice, fossil fuels, members of Congress, campaign donors, lobbying, Green New Deal

Introduction

The climate crisis is no longer a phenomenon of the future. In its 2021 report, the Intergovernmental Panel on Climate Change (IPCC) showed that emissions from human behaviors have caused unprecedented changes in the global climate, resulting in a surge of extreme weather events, sea level rise, and global temperature increase. In 2022, the United States suffered climate catastrophes ranging from heat waves and wildfires on the West Coast to hurricanes and floods on the East. According to the IPCC, as of March 2023, the global surface temperature had risen 1.1 degrees Celsius above pre-industrial levels (IPCC 2023). However, climate scientists say that the United States (US) government has not done nearly enough to respond to the threat of the climate crisis and end US dependence on fossil fuels, which produce the greenhouse gasses that have caused the planet to warm. In 2022 Congress passed the Inflation Reduction Act (IRA) to accelerate the renewable energy transition. While a step in the right direction, the IRA is not impactful enough for the US to meet its climate goals and contains provisions that encourage the production of fossil fuels (Earthjustice 2023). Congress has yet to enact environmental justice legislation that meets the moment of the climate crisis. In the face of dire warnings and worsening natural disasters, why have US government policymakers failed to prioritize climate legislation? To answer this question, I theorize that members of Congress are influenced in their legislative behavior on environmental issues by campaign donations from the fossil fuel industry.

In this study, I investigate the relationship between fossil fuel money and politics by comparing the number of donations received by members of Congress from the fossil fuel industry to members' support for environmental justice legislation. My research serves to update scholarship on environmental legislation and the influence of money in politics by quantifying how much fossil fuel money has affected MOCs' support for climate legislation since the Green New Deal was introduced in 2019.

I hypothesize that in comparing members of Congress, those who receive fossil fuel donations will be less likely to support environmental justice legislation than will those who receive fewer or no fossil fuel donations. My unit of analysis is individual members of the US House of Representatives, whom I refer to as 'members of Congress' or 'MOCs.' My independent variable is the number of donations received from the fossil fuel industry, and my dependent variable is the number of environmental justice bills supported. For my dependent variable, I use two metrics, one for MOCs' voting behavior on environmental legislation and another for the number of environmental bills they cosponsor. I run two separate tests, the first analyzing votes for environmental legislation as the dependent variable and the second analyzing cosponsoring of environmental legislation in committee. I also theorize that MOCs use committees to advocate for the interests of their campaign donors, rather than more public floor votes, to prevent allegations of bribery. This theory would be supported by a stronger relationship between the independent and dependent variables in the second test compared to the first. I control for political party affiliation to determine if party is an intervening variable in MOCs' legislative priorities around the environment.

First, I review existing literature by examining various explanations for Congress's delay in enacting climate legislation, including lobbying by the fossil fuel industry, public opinion, and campaign finance. My literature review also provides background on important concepts relevant to my research: money in politics, the legislative process in Congress, and the Green New Deal. In section three of the paper, I explain the sources of my data, how my variables are

measured and operationalized, and my method of correlation and regression analysis. Section four lays out the results of my data analysis, and my conclusion discusses the significance of those findings. In the relationship between fossil fuel donations and votes in favor of the environment, I find that political party affiliation explains the variation in voting behavior instead of donations. However, my results in Test 2 show that there is a significant relationship between fossil fuel donations received and a decrease in cosponsoring environmental justice legislation. The results of test 2 on bill cosponsorship support my hypothesis, and the difference in results between both tests supports my theory that MOCs may use committees and bill cosponsorship rather than floor votes to advocate for their donors' interests.

Literature Review

The existential threat posed by the climate crisis means that governments like the United States must take sufficient action to decarbonize their economies to ensure a livable future (Masson-Delmotte et al. 2021, 27). Already, the impacts of greenhouse gas emissions from human activity mean that some effects of climate change on the planet are irreversible (Masson-Delmotte et al. 2021, 21). The lack of action in the face of the looming climate catastrophe begs the question, why have policymakers in the US government failed to pass comprehensive environmental legislation? To answer this question, scholars have considered how lobbying by interest groups (Brulle 2018, Meng and Rhode 2019, Hein and Jenkins 2017), public opinion (Vandeweerdt et al. 2016, Schaeffer et al. 2021), and campaign finance (Ard et al. 2017) influence legislators' attitudes towards and support for pro-environment legislation. All three factors have played a part to various extents in Congress's delay in enacting climate legislation. I seek to contribute new scholarship to the existing literature by investigating the influence of fossil fuel money in campaign finance on MOCs' support for environmental legislation. My research will investigate this relationship and update previous discoveries by using the most recent data on campaign contributions from the 2020 campaign cycle and environmental legislation in the 117th Congress.

Explanations for the Failure of Climate Action in Congress

Some scholars argue that the lack of climate action from Congress is due to the influence of interest groups and lobbying efforts. According to sociologist Dr. Robert Brulle (2018), a great deal of scholarship has been dedicated to the effects of lobbying on Congress in the past, including investigation of lobbying by groups around environmental policy (290). Previous literature has found that billions of dollars are spent every year to lobby MOCs directly and that this strategy by interest groups has significantly influenced which legislation can survive the complex path to becoming law (Brulle 2018, 291). Brulle compares empirical measurements of lobbying expenditures by fossil fuel industries, transportation corporations, utilities, and trade associations to lobbying expenditures by pro-environment groups. He concludes that the success and failure of environmental legislation have been determined to a large extent by lobbying efforts of interest groups, and that pro-environment lobbyists are at a disadvantage because of how greatly fossil fuel industry lobbying expenditures dwarf them (301). Brulle also explains that a reason for the success of lobbyists in influencing the fate of legislation is the secretive and hidden nature of lobbying, which allows for information and scientific facts to be distorted and biased (Brulle 2018, 302). He argues that lobbying has a larger effect on lawmakers than outside

mobilizations or protests by environmental advocacy groups because lobbyists can establish a long-term relationship with offices and exert influence for extended periods (Brulle 2018, 302).

Authors Kyle C. Meng and Ashwin Rode agree with Brulle's conclusions and attribute the defeat of the 2009 American Clean Energy and Security Act (also known as "Waxman-Markey" after its sponsors) to an extensive lobbying campaign by groups who stood to lose from its passage. A major reason for the failure of Waxman-Markey was that groups who expected losses from its passage were more effective at lobbying than groups who expected to benefit (Meng and Rode 2019, 473). Meng and Rode find that lobbying decreased the bill's chances of passage by 13 percentage points (473). Sociologists James Everett Hein and J. Craig Jenkins (2017) also argue that the bill failed due to opposition from corporate leaders who had a great deal of influence on policymaking (112). For these reasons, scholars have concluded that lobbying by interest groups is one of the main reasons for the failure of climate legislation in Congress.

Another possible explanation for Congress's delay on climate action is public opinion and a lack of enthusiasm among Americans for environmental legislation. In 'Climate Voting in the US: the Power of Public Concern,' Dr. Clara Vandeweerdt et al. (2016) examines the relationship between roll call votes on cap-and-trade legislation and public opinions on climate action. This analysis shows a strong relationship between public opinion on this specific kind of environmental legislation and MOCs' support for it, even when controlling for the influence of outside groups and campaign funding (Vandeweerdt et al. 2016, 278). Vandeweerdt et al. argues that climate change is not a priority for voters because many would rather Congress focus on more short-term issues and fear that decarbonization will harm jobs and economic growth (270). The authors also present evidence showing that many Americans are not familiar with the details of climate policy and that opinions on climate change are likely to change in the future as its effects become more prominent (Vandeweerdt et al. 2016, 270).

Another study shows that higher levels of support for climate legislation increase the likelihood that climate policies are adopted. Dr. Lena Maria Schaeffer et al. (2021) compares 6 countries in the Organisation for Economic Co-operation and Development (OECD), including the US, from 1995 to 2010 to determine whether variation in public support for climate change mitigation affects whether nations adopt climate policies (137). She concludes that an increase in the level of public demand for climate action from one period to the next increases climate change mitigation policy implementation (Schaeffer et al. 2021, 152). These conclusions suggest that a reason for the US Congress's failure to pass legislation to prevent the climate crisis is the lack of public concern on the issue.

Finally, the influence of fossil fuel money in campaign finance is a factor that may determine why some MOCs oppose environmental legislation. Although little research has been devoted to the effect on environmental policy, scholars have shown that contributions from political action committees (PACs) affect the legislative behavior and priorities of MOCs (Fellowes and Wolf 2004). Research by Dr. Kerry Ard et al. of the Ohio State University in 2017 also shows a strong relationship between donations from climate change countermovement (CCCM) groups and a decrease in MOCs' likelihood of voting for environmental legislation (Ard et al. 2017, 1124).

Money in Politics

The effect of money on politics and legislative behavior is an area to which a great deal of scholarship has been devoted. Public policy experts Dr. Matthew Fellowes and Dr. Patrick Wolf

(2004) compare individual and PAC contributions with votes on business affairs legislation, finding that there is a relationship between a greater proportion of campaign donations from businesses and individual MOCs supporting bills that advance business interests (321). They also found that representatives who rely heavily on business PAC donations are more likely to support pro-business policies (Fellowes and Wolf 2004, 322). To explain their findings, they analyze other methods of legislative advocacy than roll call votes, such as work on committees, that MOCs use to support or oppose legislation to conceal outside influences (Fellowes and Wolf 2004, 317). Their work supports the claim that lawmakers' decisions on the issue of business policy are influenced by corporate donations, which has led scholars to infer that other issue areas could be influenced in a similar way as well.

Turning to the influence of money in environmental legislation, the work of Ard et al. (2017) investigates the relationship between environmental votes in Congress and PAC donations from climate change countermovement (CCCM) industries. 'CCCM' is a term that refers to the mobilization of business PACs against environmental legislation and climate action following environmental victories in the 1970s (Ard et al. 2017, 1107). Ard et al. perform a meta-analysis that shows that CCCM industry donations significantly decreased the likelihood of a MOC casting a pro-environment vote (1126). They also find that increased donations from CCCM industries were associated with Democrats voting against their party on pro-environment bills (Ard et al. 2017, 1126). These results help explain how fossil fuel industry donations have prevented climate legislation from being passed in Congress in the past and show that a major barrier to climate action in the US is corruption in Congress.

The Importance of Bill Cosponsorship

The relationship of campaign donations to House floor votes on a variety of issues including the environment has already been analyzed. However, before a bill is put to a floor vote, it must pass through a long and complex process with many steps and interventions by different policy actors. Fellowes and Wolf highlight how Congressional investigation beyond roll call votes on legislation is necessary to determine the outside influence on legislation because the publicity surrounding roll call votes makes legislators keen to hide any action that might indicate a "quid-pro-quo" with outside groups (317). Dr. Eleanor Powell and Dr. Justin Grimmer (2016) seek to expose the influence of campaign donations on MOCs by analyzing data on a certain process that occurs in Congress: committee exile.

When party control of the House switches, the new majority party gains seats on committees and the minority party loses seats. This means some MOCs, usually the most junior ones, are kicked off their committee assignments. Although it may seem obscure or irrelevant, Powell and Grimmer explain that committee exile can be studied as an indicator of the influence of corporate PAC donations on the inner workings of Congress. Numerous studies have shown that one of the places where legislators have the most power to influence legislation is in committee because they are more private than floor votes and often negotiations happen behind closed doors (Powell and Grimmer 2016, 977). Powell and Grimmer find that PACs donate strategically to MOCs who have power over legislation relevant to them based on their committee assignment (Powell and Grimmer 2016, 975). They show that PAC donations to MOCs significantly decreased when MOCs were exiled from a committee because the PACs no longer had a vested interest in maintaining that relationship and lever of power (Powell and Grimmer 2016, 975). Their research shows that scholars must investigate beyond floor votes and study MOCs' behaviors in

introducing and cosponsoring legislation in committees to see the influence of outside groups and campaign donations.

Powell and Grimmer's findings corroborate Brulle's findings on the effectiveness of lobbying and with Fellowes and Wolf's argument that legislators use committees to advocate for or against bills in secret. These three studies show that the fate of legislation is often determined behind closed doors, hidden from the public and media. Investigation of environmental legislation beyond floor votes and into committees in Congress is essential to determine the reasons for its failure.

The Green New Deal

In February 2019, Senator Ed Markey and Representative Alexandria Ocasio-Cortez introduced a Green New Deal (GND) resolution in Congress that would recognize the duty of the federal government to enact legislation to address climate change and socioeconomic inequality (Office of Senator Ed Markey 2019). According to Dr. Parrish Bergquist et al. (2020), the Green New Deal is a legislative proposal that combines investments in renewable energies with social and economic policy toward issues like healthcare, minimum wage, and housing (1-2). It is a unique piece of legislation because it seeks to address the intersecting crises of climate change and economic inequality, which makes it more popular than legislation only concerning the environment (Bergquist et al. 2020, 1-2). The Green New Deal is also more than just one piece of legislation. The Green New Deal pledge is a commitment that MOCs uphold when they sign on to all ten bills included in the Green New Deal and pledge not to take more than $200 in fossil fuel donations (Budryk 2022). The ten bills include legislation such as the Green New Deal for Public Housing and the Green New Deal for Schools (Eilertsen 2022). The number of GND bills a MOC cosponsors is an indicator of their commitment to advancing environmental justice legislation and supporting renewable energy. In this way, the Green New Deal provides an opportunity to examine the behind-the-scenes legislation of MOCs on climate legislation.

Study Design

My research serves to update scholarship on environmental legislation and the influence of fossil fuel money since the Green New Deal was introduced in 2019. Due to the Supreme Court's decision in *Citizens United v. Federal Election Commission (2010)* [558 U.S. 310], which radically changed PAC spending rules, many studies like the work of Ard et al. only use data on PAC donations before 2010 (1114). To understand the obstacles that environmental legislation faces in Congress today, 13 years after *Citizens United*, a new analysis that includes data on campaign donations from recent years is necessary. This study fills this gap by using data on legislative behavior from the 117th Congress and campaign donations from the 2020 election cycle. My research assumes that the donations that MOCs received in the 2020 election cycle are most directly affecting their legislative behavior in the subsequent legislative session. Additionally, Ard et al. only use data on roll call votes in their analysis. Roll call votes are just one way for MOCs to influence the outcome of environmental legislation, however, I investigate alternative pathways for MOCs to support or prevent environmental legislation. I seek to show how fossil fuel donations affect the rate at which MOCs actively cosponsor environmental justice legislation. Most previous literature uses data on votes from older climate legislation, such as cap-and-trade bills from the early Obama administration (Vandeweerdt et al. 2016, 271), so I use data on a recent bill that has garnered much attention: the Green New Deal. To measure how

much effort MOCs are making to pass comprehensive climate legislation, I use data on the number of Green New Deal bills each MOC has cosponsored.

Theory and Expectations

This study hypothesizes that in comparing members of the US House of Representatives, those who receive more donations from the fossil fuel industry will be less likely to cosponsor or vote for environmental justice legislation than those who receive fewer or no fossil fuel donations. My null hypothesis is that in comparing members of the US House of Representatives, those who receive more fossil fuel donations will be no less likely to cosponsor or vote for environmental justice legislation than those who receive fewer or no fossil fuel donations. I theorize that the lack of climate action in Congress is due to the influence of fossil fuel donations on representatives' decision-making on environmental legislation and that this influence begins well before bills are put to a vote on the House floor. I hope to show that environmental legislation has stalled in Congress because MOCs are not supporting environmental legislation when it is introduced to committees. I acknowledge that other factors may influence a MOC's choice to support or not support environmental justice legislation. For example, one's political party affiliation is a powerful factor that guides MOCs' choices on all kinds of legislation. I control for political party affiliation in my tests to analyze how affiliation affects MOCs' voting behavior compared to fossil fuel donations and whether fossil fuel donations have a greater impact on legislative advocacy for either party.

Operationalization and Measurement of Concepts

The independent variable of this study is the amount of fossil fuel donations received by a MOC, coded as 'ffmoney' in my dataset. The values in the ffmoney variable are interval-level data in dollar amounts from the Center for Responsible Politics. Congressional candidates are required to submit financial reports to the Federal Elections Commission, and the Center for Responsible Politics makes this data accessible on its website, opensecrets.org, by listing the number of donations MOCs have received from industries (Open Secrets 2023). To calculate the total amount of money received in donations from the fossil fuel industry for each MOC in the 2020 cycle, I combined the amounts received from coal mining, natural gas and oil, and natural gas pipeline industries.

The dependent variable in this study is the amount of environmental justice legislation a MOC supports. I use two different interval-level scores to measure this: the MOC's score from the League of Conservation Voters (LCV) and a score based on cosponsoring Green New Deal (GND) bills. A MOC's LCV score is calculated by dividing the number of pro-environment votes a MOC has cast by the total number of votes that have occurred on environmental issues, and is labeled in my dataset as 'lcvscore'. In other words, this score is the percentage of times the MOC has chosen to support environmental legislation in floor votes rather than not. This data is collected and analyzed by the League of Conservation Voters (LCV), an environmental advocacy non-profit. The GND score gives a MOC a score from 0 to 10 which indicates how many of the 10 bills included in the Green New Deal the MOC has cosponsored. Saul Levin, Policy Advisor for Congresswoman Cori Bush, compiled data ranking all members of the 117th Congress based on their GND score. This variable is labeled 'gndscore' in my dataset.

Finally, I control for party affiliation using a nominal-level variable named "party" in my data set coded as 1 for Democrats and 2 for Republicans. There were no independent or third-party members of the House. By introducing a control variable, I seek to evaluate the strength of my theory and determine whether other variables may be at play in the relationship between my independent and dependent variables.

Research Design

My unit of analysis in this study is members of the House of Representatives. The dataset includes 423 members from the 117th Congress. From the 435 total members of the House of Representatives, I removed members who left office partway through the term and the candidates who replaced them in special elections. I did this to avoid exceptional cases in representatives who had less time to cosponsor bills while in office and complications with different campaign funding cycles. I did not include non-voting delegates from Puerto Rico, the District of Columbia, the Virgin Islands, American Samoa, the Northern Mariana Islands, or Guam in my dataset. Since both my independent and dependent variables are interval-level, I perform correlation and regression analyses on my tests. A correlation test measures the strength of the relationship between variables, and a regression test determines the degree to which the independent variable (IV) explains variation in the dependent variable (DV). In both of my tests, fossil fuel money was the IV, but in Test 1 the DV was LCV score and in Test 2 the DV was GND score. I control for party affiliation in both tests to compare the relationship between the variables across party lines. The regression tests will determine whether variation in LCV scores and GND scores is determined by variation in fossil fuel money donations.

The results of Test 1 will support my hypothesis if they show a significant relationship between higher fossil fuel industry donations and a lower LCV score. Test 2 will support my hypothesis if it shows a significant relationship between higher fossil fuel industry donations and a lower GND score. I also theorize that MOCs use committees and bill cosponsorship, rather than floor votes, to advocate more effectively for legislation and appease campaign donor interests. The results will support this theory if the relationship in Test 2 is stronger than the relationship in Test 1.

Results and Analysis

Before performing my tests, I ran descriptive statistics on my variables. The maximum amount of fossil fuel money that a MOC received in the 2020 campaign cycle was $683,501 and the minimum was $0. Excluding outliers, the mean was $26,553.36, with a standard deviation of $30,146 (see Figure 1).

Figure 1: Boxplot describing variation in fossil fuel donations for all members of the House. Values are in dollar amounts.
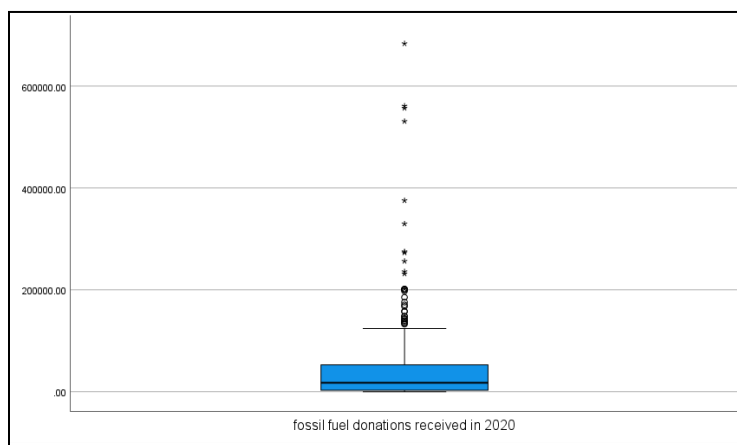
The typical number of fossil fuel money donations to MOCs varies across the two parties. The maximum amount of fossil fuel campaign donations received by Democrats was $375,410, and excluding outliers, the mean was $7,234.39 with a standard deviation of $9,068. The maximum for Republicans was $683,501, and excluding outliers, the mean was $50,171.92 with a standard deviation of $39,685 (see Figure 2).

Figure 2: Boxplots describing the variation in fossil fuel donations in each party. Values are in dollar amounts.
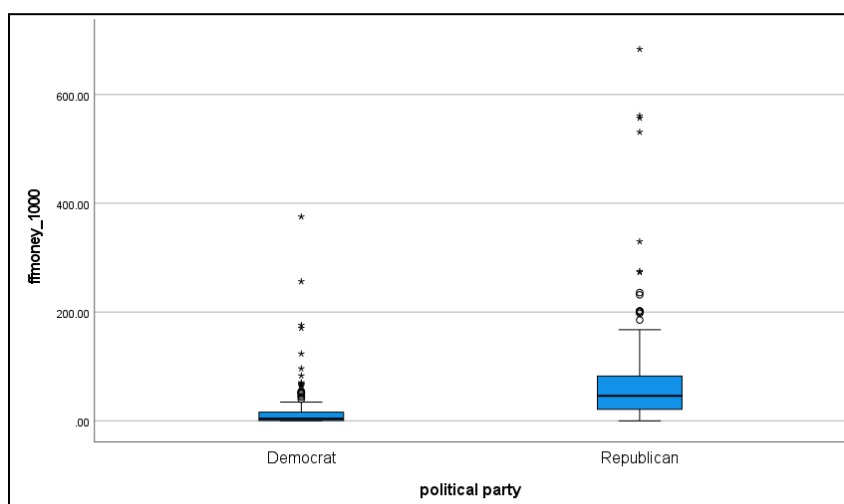
The maximum LCV score for all members of the House was 100 and the minimum was 0. The mean was 56.94 with a standard deviation of 44.09 with no outliers. The maximum number of Green New Deal bills cosponsored was 10 and the minimum was 0. Excluding outliers, the mean was 0.28 with a standard deviation of 0.63.

These data varied across the two parties as well. Democratic MOCs had a minimum LCV score of 91 and a maximum of 100. Excluding outliers, the mean LCV score for Democrats was 100 with a standard deviation of 0. Republicans had a minimum LCV score of 0 and a maximum of 57, and excluding outliers, their mean was 10.29 with a standard deviation of 7.12 (see Figure 3). Overall, there was much more variation in how Republicans voted on environmental issues compared to Democrats, who voted in line with the party almost 100% of the time. The mean number of Green New Deal bills cosponsored by a Democrat, excluding outliers, was 1.65 with a standard deviation of 2.10, and no Republicans co sponsored any of the Green New Deal bills (see Figure 4).

Figure 3: Boxplots describing the variation in LCV score in each party.
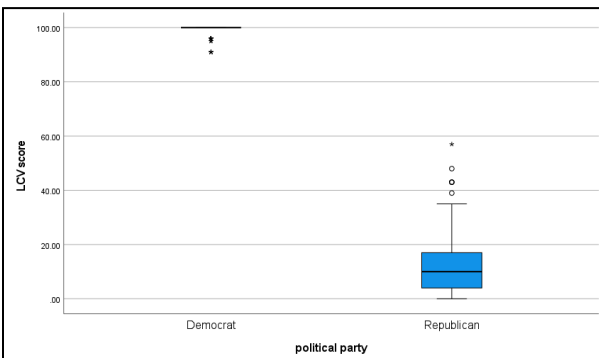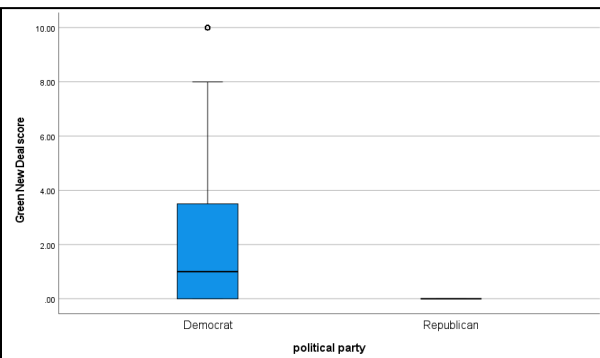
Figure 4: Boxplots describing the variation in GND score in each party.

When running my tests, I computed a new variable called ffmoney_1000 to report the number of campaign donations a MOC received from the fossil fuel industry in 2020 in thousands of dollars. To compute this variable, I divided my original variable, ffmoney, by 1000. I did this to be able to report clearer results between fossil fuel donations and my dependent variables because the values of ffmoney in single dollar amounts were very large compared to the values of the other variables. Scaling ffmoney in this way displayed coefficients in my results for the independent variable that were easier to interpret.

Test 1: Fossil fuel money on LCV score

Table 1.1 shows the results of correlation and statistical significance in Test 1, ffmoney_1000 on lcvscore. The correlation analysis yielded a Pearson's r of -0.35 and a p-value of <0.001. To meet the significance level, p must be less than 0.05, so the correlation between the two variables is significant. The Pearson's r value indicates a negative linear relationship between the independent and dependent variables.

Table 1.1: Correlation and Statistical Significance of lcvscore and ffmoney_1000

		Fossil fuel donations 2020 ($)	LCV score
Fossil fuel donations 2020 ($)	Pearson Correlation Sig. (2-tailed) N	1 423	-0.351 <0.001 423
LCV score	Pearson Correlation Sig. (2-tailed) N	-0.351 <0.001 423	1 423

Table 1.2 shows the results of a bivariate regression test of the independent variable on the dependent, controlling for party. Model 1 yielded a significant result with a coefficient for X of -0.205 which is statistically significant with a p-value of <0.001 and a t-score of -7.681. Model 1 would predict that for every $1000 increase in fossil fuel donations, a MOC's LCV score would decrease by 0.205. However, in Model 3, which conducted a controlled comparison for the effect of both ffmoney_1000 and party on lcvscore, the p-value for ffmoney_1000 on lcvscore was 0.358 and for party on lcvscore it was 0.000. Since a p-value of 0.358 does not meet the significance level of p<0.05, this result indicates that fossil fuel money is not explaining variation in LCV score. Instead, either the intervening variable is doing the explaining or interaction is happening. Model 4, which tested for an interaction relationship, yielded a significant result for the effect of party and an interaction variable on LCV score. The coefficient for party was -87.89 with a p-value of <0.0001 and t-score of -107.738. For ffmoney_1000*party the coefficient was 0.029, the p-value was 0.037, and the t-score of 2.087. The effect of ffmoney_1000 is not significant, yielding a p-value of 0.062 and a t-score of -1.87.

Table 1.2: Regression Analysis of lcvscore, by ffmoney_1000, controlling for party

	Model 1: ffmoney_1000 on lcvscore	Model 2: party on lcvscore	Model 3: ffmoney_1000 + party on lcvscore	Model 4: ffmoney_1000 + party + ffmoney_1000*party on lcvscore
Constant	65.770	186.436	186.609	187.713
Coefficient for X	-0.205		0.005	-0.049
t-score [for X]	-7.681		0.920	-1.873
p-value [for X]	<0.001**		0.358	0.062
Coefficient for Z		-86.954	-87.193	-87.899
t-score [for Z]		-125.163	-116.981	-107.738
p-value [for Z]		0.000**	0.000**	<0.001**
Coefficient for X*Z				0.029
t-score [for X*Z]				2.087

| p-value [for X*Z]				0.037*
R^2	0.121	0.974	0.974	0.974
N	423	423	423	423

*=p<0.05, **=p<0.01

The results of the controlled comparison are displayed in Figure 5, a scatterplot of lcvscore by ffmoney_1000 with two lines of best fit, one for each party. These results indicate that the relationship between my independent and dependent variables is interactive. Based on the results of model 4, the equation to determine a MOC's LCV score can be written as such:

lcvscore = 187.71 – 87.90(party) + 0.029(ffmoney_1000*party)

The effect of this interaction on lcvscore has a measure of association, R^2, of 0.974, indicating that 97.4% of the variation in MOCs' LCV score is caused by political party affiliation and the interaction variable.

Figure 5: scatterplot of lcvscore by ffmoney_1000 with fit lines at subgroups by party
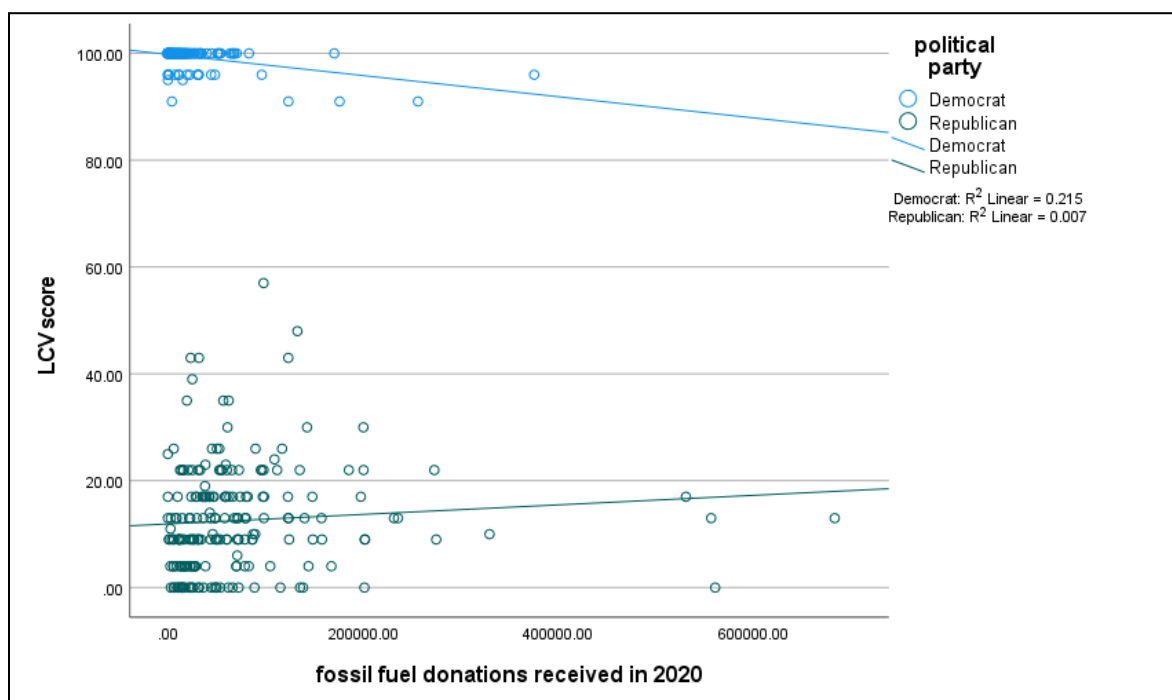
Test 2: Fossil fuel money on GND score

Table 2.1 shows the results of correlation and statistical significance in Test 2 where the dependent variable was gndscore. Here, the correlation analysis yielded a Pearson's r of -0.25 and a p-value of <0.001, indicating a significant correlation between the two variables. The Pearson's r value again shows a negative linear relationship between the variables.

Table 2.1: Correlation and Statistical Significance of gndscore and ffmoney_1000

		Fossil fuel donations, 2020 ($)	GND score
Fossil fuel donations 2020 (thousands of $)	Pearson Correlation Sig. (2-tailed) N	1 423	-0.245 <0.001 423
GND score	Pearson Correlation Sig. (2-tailed) N	-0.245 <0.001 423	1 423

Model 5 of my regression analysis of ffmoney_1000 on gndscore also yielded a significant result, with a coefficient for ffmoney_1000 of -0.009, a p-value of <0.001, and a t-score of -5.185. Model 5 would predict that for every $1000 increase in fossil fuel donations, the number of Green New Deal bills a MOC cosponsors would decrease by 0.009. When I controlled for the effect of party on gndscore in Model 7, the significance of ffmoney_1000 disappeared again. This yielded a p-value of 0.079 and t-score of -1.763 for ffmoney_1000 on gndscore and a p-value of <0.001 and t-score of -9.952 for party on gndscore. However, Model 8 tested for an interaction relationship and showed a significant result for all 3 variables, each having a p-value of <0.001 at a significance level of p<0.05.

Table 2.2: Results of Regression Analysis of gndscore, by ffmoney_1000, Controlling for party

|	Model 5: ffmoney_1000 on gndscore	Model 6: party on gndscore	Model 7: ffmoney_1000 + party on gndscore	Model 8: ffmoney_1000 + party + ffmoney_1000*party on gndscore
Constant	1.718	5.241	5.130	5.865
Coefficient for X	-0.009		-0.003	-0.038
t-score [for X]	-5.185		-1.763	-4.516
p-value [for X]	<0.001**		0.079	<0.001**
Coefficient for Z		-2.620	-2.452	-2.932
t-score [for Z]		-11.333	-9.952	-11.001
p-value [for Z]		<0.001**	<0.001**	<0.001**
Coefficient for X*Z				0.019
t-score [for X*Z]				4.251
p-value [for X*Z]				<0.001**
R^2	0.058	0.232	0.236	0.266
N	423	423	423	423

*=p<0.05, **=p<0.01

Based on these results, the relationship between my independent and dependent variables in the controlled comparison in Test 2 is interactive. ffmoney_1000 does not affect gndscore in Republicans because no Republicans co sponsored any Green New Deal bills at all. It does affect Democrats, demonstrated by a line showing a negative relationship between ffmoney_1000 and gndscore. Based on the results of model 8, the equation to determine a MOC's GND score is:

gndscore= 5.865 – 0.038(ffmoney_1000) – 2.932(party) + 0.019(ffmoney_1000*party)

Model 8 has an R squared of 0.266, indicating that 26.6% of the variation in GND score can be attributed to political party affiliation, fossil fuel donations, and the interaction variable. Figure 6 depicts the interactive relationship between fossil fuel donations and GND score in a scatterplot with a line of best fit for each party.

Figure 6: scatterplot of gndscore by ffmoney_1000 with fit lines at subgroups by party
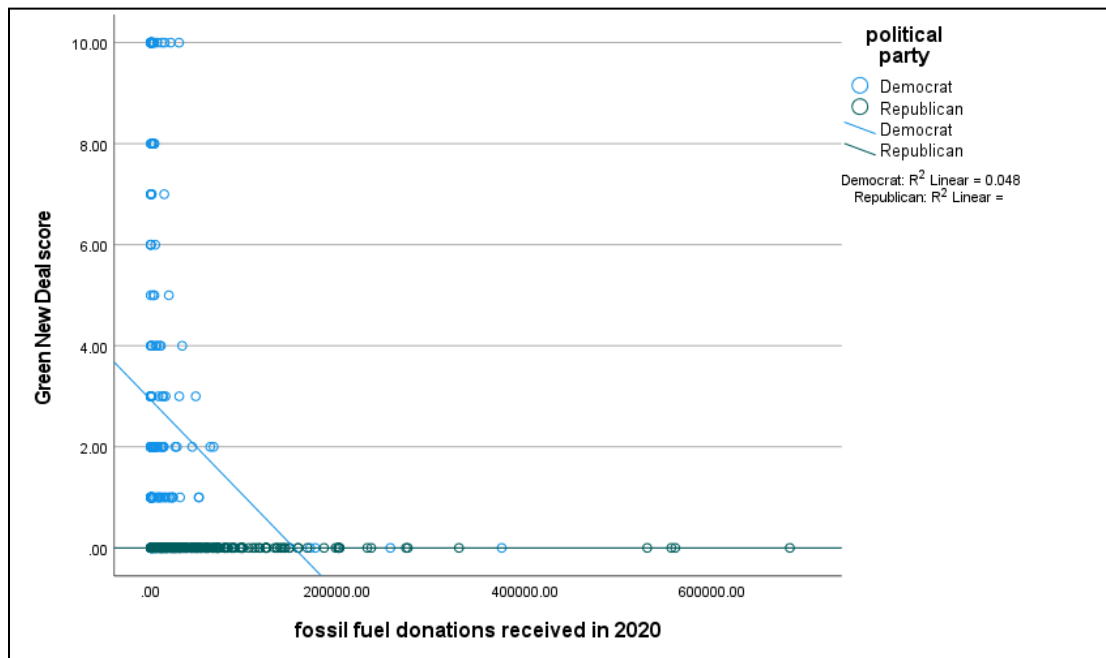
Conclusion

In this study, I hypothesized that members of the US House of Representatives who receive more donations from the fossil fuel industry are less likely to vote for environmental justice legislation than those who receive fewer or no fossil fuel donations. The results of Test 1, fossil fuel donations on LCV score, do not support this hypothesis because the effects of the fossil fuel money variable on LCV score are not significant when controlling for party affiliation. Although there is interaction happening, only party and the interaction variable (ffmoney_1000*party) are significant. The R squared shows that 97.4% of the variation in LCV score can be attributed to party affiliation and the interaction variable. The results also report standardized beta values of -0.998 for party and 0.095 for the interaction variable, showing that the effect of party on

lcvscore is much greater than the effect of the interaction variable on it. Therefore, MOCs' decisions on supporting environmental issues in floor votes are almost entirely determined by their political party affiliation.

This result was not entirely surprising to me. Previous literature has already investigated the difficulty that researchers have in showing any relationship between campaign donations and floor votes by MOCs. Because it is illegal for MOCs to be bribed for their votes, they are careful not to show favoritism for their campaign donors in the highly publicized environment of floor votes (Fellowes and Wolf 2004, 315-316). An exception to this is the findings of Ard et al., who show that receiving more fossil fuel donations decreased the likelihood that a MOC would cast a pro-environment vote. The contradiction between the results of my study and the work of Ard et al. may be explained by the fact that our methods of data analysis were not the same: Ard et al. ran a sensitivity analysis on 24 different environmental bills over three decades (1113). They also used data from 1990-2010, whereas I only analyzed data from one campaign cycle.

The results of Test 1 are also consistent because of the power that political parties have in Congressional operations today. Party unity is an important political tool used by party leadership in the House to legislate, and party leaders like former Speaker of the House Nancy Pelosi are known for being effective at whipping MOCs to vote along party lines. For these reasons, it is unsurprising that political party affiliation is so powerful a factor in explaining MOCs' votes on environmental issues.

The second part of my hypothesis posited that MOCs who receive more fossil fuel donations will be less likely to cosponsor environmental legislation. The results of the effects of fossil fuel money on MOCs' behaviors in cosponsoring Green New Deal bills support this hypothesis. In Test 2, ffmoney_1000 on gndscore, my control variable of party produced an interactive relationship once again, but this time fossil fuel money, party affiliation, and the interaction variable were all significant. Model 8 produced a standardized beta coefficient of -1.06 for fossil fuel money, -0.541 for party, and 1.03 for the interaction variable. The R squared indicates that 26.6% of the variation in GND score can be attributed to fossil fuel money, party affiliation, and the interaction variable. This relationship is only present under the condition that the MOC is a Democrat because there was no variation across GND scores for Republicans. These results support my hypothesis that MOCs who receive more fossil fuel donations cosponsor fewer Green New Deal bills under the condition that the MOC is a Democrat.

I also hypothesized that the effect of fossil fuel donations would be more visible in GND bill cosponsorship than LCV score due to the more secretive nature of committees compared to public floor votes. The results of both Test 1 and Test 2 support this hypothesis because the relationship between fossil fuel donations and support for environmental legislation was only present when GND score was the dependent variable, not LCV score. This indicates that Democrats use co sponsorship and committees to advocate for or against certain legislation depending on how their campaign donations influence them. This is a compelling discovery because it shows that one of the barriers to passing climate legislation is corruption in Congress. This corruption has given the fossil fuel industry greater influence on lawmaking and put the environmental movement at a disadvantage.

Although these results are significant, alternative explanations for the relationship exist. It is possible that the variables in this study could be flipped in some instances, meaning that fossil fuel industries are donating to MOCs because they don't support environmental justice legislation. This is likely to be true for the Republican party, which continues to praise fossil

fuels as an energy source despite dire warnings from climate scientists (Jordans 2022). It would be sensible for fossil fuel companies to donate to these Republican candidates with the knowledge that they would vote to protect their interests. However, as of 2023, the Democratic party's platform website explicitly calls for "mobilizing historic, transformative public and private investments to launch a clean energy revolution." Even with pro-renewable energy and anti-fossil fuel rhetoric from the Democratic party, fossil fuel industries are still donating to many Democratic candidates (Open Secrets 2020). Therefore, it is more likely that fossil fuel industries are trying to sway Democrats' support for climate action than rewarding them for not supporting it.

The relationship found between fossil fuel donations and MOCs' support for environmental legislation could also be affected by lobbying by interest groups or public opinion. One limitation of my study was that I did not consider lobbying expenditures by fossil fuel companies and environmental groups around the Green New Deal bills. These effects could be causing this relationship rather than campaign donations. This study also did not consider factors such as geography or the impacts of climate change on MOCs' districts. These factors may help explain variations in how MOCs cosponsor environmental bills. Even if these factors are irrelevant, since only 26.6% of the variation in GND scores is explained by fossil fuel campaign donations, this still leaves 73.4% of the variation that is unexplained by either fossil fuel donations or party affiliation. Future research should control for variables like lobbying expenditures, public opinions on environmental legislation, and climate change impacts of MOCs' districts to attempt to isolate the effects of campaign donations on legislative behavior more carefully. Scholars should also study this relationship in the Senate to see the effects of differences in how elections are handled across chambers.

Despite the limitations of my research, these findings show that corruption and the influence of fossil fuel money in Congress are affecting the fate of climate legislation. The fossil fuel industry is using campaign donations as a tool to sabotage legislation that pertains to them. This has given them an unfair influence compared to environmental advocacy groups and those affected by environmental disasters and climate change. The US's energy security and economic stability, as well as the future of humanity, depend on its ability to switch to renewable energies and end its dependence on fossil fuels. This change is difficult to achieve while the fossil fuel industry has a corrupting influence on Congress.

These findings show that to pass comprehensive climate legislation to decarbonize and transition off fossil fuels, campaign finance reform or anti-corruption measures are necessary. Unfortunately, the demonstrated corruption in Congress has made these types of reforms difficult in recent years. Another solution is to organize to elect representatives who pledge to reject fossil fuel industry donations in their campaigns for Congress. The No Fossil Fuel Money Pledge, included in the Green New Deal pledge, is a promise that candidates and representatives make to reject all contributions over $200 from oil, gas, and coal industry executives, lobbyists, or PACs (No Fossil Fuel Money Pledge 2021). Individual MOCs can make commitments like this pledge and organize others to do the same to prevent widespread corruption and fossil fuel influence in Congress. Scholars and policy experts should devote resources to finding more solutions like these to reform and improve Congress so that it can respond to critical issues like the climate crisis effectively. In order to achieve the comprehensive action required to accelerate the clean energy transition and avoid the worst effects of climate change, we must end the corrupt influence of the fossil fuel industry on politics.

Appendix

Fossil Fuel Money Statistics

fossil fuel donations received in 2020

N	Valid	423
	Missing	0
Mean		42969.6596
Std. Deviation		75254.30618
Range		683501.00
Minimum		.00
Maximum		683501.00
Percentiles	25	3000.0000
	50	17625.0000
	75	52812.0000

Descriptive Statistics (excl. outliers)

	N	Minimum	Maximum	Mean	Std. Deviation
fossil fuel donations received in 2020	391	.00	124300.00	26553.3581	30146.65155
Valid N (listwise)	391				

Fossil Fuel Money: Democrats Statistics

fossil fuel donations received in 2020

N	Valid	216
	Missing	0
Mean		16325.2222
Std. Deviation		38292.20847
Range		375410.00
Minimum		.00
Maximum		375410.00
Percentiles	25	582.5000
	50	4000.0000
	75	15995.5000

Descriptive Statistics (excl. outliers)

	N	Minimum	Maximum	Mean	Std. Deviation
fossil fuel donations received in 2020	194	.00	34556.00	7234.3918	9068.60066
Valid N (listwise)	194				

Fossil Fuel Money: Republicans Statistics

fossil fuel donations received in 2020

N	Valid	207
	Missing	0

Mean		70772.5507
Std. Deviation		92465.33454
Range		683501.00
Minimum		.00
Maximum		683501.00
Percentiles	25	21000.0000
	50	45965.0000
	75	82925.0000

Descriptive Statistics (excl. outliers)

	N	Minimum	Maximum	Mean	Std. Deviation
fossil fuel donations received in 2020	191	.00	167600.00	50171.9162	39685.26572
Valid N (listwise)	191				

LCV Score Statistics
LCV score

N	Valid	423
	Missing	0
Mean		56.9433
Std. Deviation		44.09486
Range		100.00
Minimum		.00
Maximum		100.00
Percentiles	25	11.0000
	50	95.0000
	75	100.0000

LCV Score: Democrats Statistics
LCV score

N	Valid	216
	Missing	0
Mean		99.4907
Std. Deviation		1.63392
Range		9.00
Minimum		91.00
Maximum		100.00
Percentiles	25	100.0000
	50	100.0000
	75	100.0000

Descriptive Statistics (excl outliers)

	N	Minimum	Maximum	Mean	Std. Deviation
LCV score	194	100.00	100.00	100.0000	.00000
Valid N (listwise)	194				

LCV Score: Republicans Statistics

LCV score

N	Valid	207
	Missing	0
Mean		12.5459
Std. Deviation		10.07239
Range		57.00
Minimum		.00
Maximum		57.00
Percentiles	25	4.0000
	50	10.0000
	75	17.0000

Descriptive Statistics (excl. outliers)

	N	Minimum	Maximum	Mean	Std. Deviation
LCV score	187	.00	23.00	10.2888	7.12123
Valid N (listwise)	187				

Test 1 (ffmoney_1000 and lcvscore) Correlations

		LCV score	ffmoney_1000
LCV score	Pearson Correlation	1	-.351[**]
	Sig. (2-tailed)		<.001
	N	423	423
ffmoney_1000	Pearson Correlation	-.351[**]	1
	Sig. (2-tailed)	<.001	
	N	423	423

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

Model 1: ffmoney_1000 on lcvscore Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.351ª	.123	.121	41.34542

a. Predictors: (Constant), ffmoney_1000

Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	65.770	2.316		28.403	<.001
	ffmoney_1000	-.205	.027	-.351	-7.681	<.001

a. Dependent Variable: LCV score

Model 2: party on lcvscore

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.987ª	.974	.974	7.14181

a. Predictors: (Constant), political party

Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	186.436	1.091		170.837	.000
	political party	-86.945	.695	-.987	-125.163	.000

a. Dependent Variable: LCV score

Model 3: ffmoney_1000 + party on lcvscore

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.987ª	.974	.974	7.14312

a. Predictors: (Constant), political party , ffmoney_1000

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	186.609	1.108		168.459	.000
	ffmoney_1000	.005	.005	.008	.920	.358
	political party	-87.193	.745	-.990	-116.981	.000

a. Dependent Variable: LCV score

*Model 4: ffmoney_1000 + party + ffmoney_1000*party on lcvscore*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.987[a]	.974	.974	7.11474

a. Predictors: (Constant), ffmoney_100 * party, political party , ffmoney_1000

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	187.713	1.224		153.417	.000
	ffmoney_1000	-.049	.026	-.083	-1.873	.062
	political party	-87.899	.816	-.998	-107.738	<.001
	ffmoney_100 * party	.029	.014	.095	2.087	.037

a. Dependent Variable: LCV score

Test 2 (ffmoney_1000 and gndscore)

		ffmoney_1000	Green New Deal score
ffmoney_1000	Pearson Correlation	1	-.245**
	Sig. (2-tailed)		<.001
	N	423	423
Green New Deal score	Pearson Correlation	-.245**	1
	Sig. (2-tailed)	<.001	
	N	423	423

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

Model 5: ffmoney_1000 on gndscore

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.245ª	.060	.058	2.63283

a. Predictors: (Constant), ffmoney_1000

Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.718	.147		11.648	<.001
	ffmoney_1000	-.009	.002	-.245	-5.185	<.001

a. Dependent Variable: Green New Deal score

Model 6: party on gndscore

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.484ª	.234	.232	2.37708

a. Predictors: (Constant), political party

Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.241	.363		14.428	<.001
	political party	-2.620	.231	-.484	-11.333	<.001

a. Dependent Variable: Green New Deal score

Model 7: ffmoney_1000 + party on gndscore

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.489ª	.239	.236	2.37115

a. Predictors: (Constant), political party , ffmoney_1000

Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		

1	(Constant)	5.130	.368		13.951	<.001
	ffmoney_1000	-.003	.002	-.080	-1.763	.079
	political party	-2.462	.247	-.454	-9.952	<.001

a. Dependent Variable: Green New Deal score

Model 8: ffmoney_1000 + party + ffmoney_1000*party on gndscore

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.520ᵃ	.271	.266	2.32439

a. Predictors: (Constant), ffmoney_100 * party, political party , ffmoney_1000

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.865	.400		14.671	<.001
	ffmoney_1000	-.038	.008	-1.060	-4.516	<.001
	political party	-2.932	.267	-.541	-11.001	<.001
	ffmoney_100 * party	.019	.004	1.030	4.251	<.001

a. Dependent Variable: Green New Deal score

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**TANF SPENDING ON BASIC
ASSISTANCE AND STATE POVERTY RATES**

Tyler Godding

Abstract

Temporary Assistance for Needy Families (TANF) has been studied in many different ways from what affects decisions on spending to its effectiveness on economic security alongside other government programs. This paper examines the convergence of these two areas: the effect of TANF spending for basic assistance (cash assistance) on a state's poverty rate. Other cash assistance programs that have been studied vary greatly in their policy design from TANF. Determining if TANF has a similar poverty-reducing effect will give insight into how cash assistance programs should be designed to effectively reduce poverty.

This paper uses correlation and regression analysis to test if states with a higher percentage of TANF spending on cash assistance are more likely to have a lower poverty rate than those with a lower percentage of TANF spending on cash assistance. The main finding of this paper is that the percentage of TANF spending going towards basic assistance is not significantly related to a state's poverty rate which is similar to the findings of an earlier study. This finding suggests that TANF's policy design is inhibiting its poverty-reducing ability as these results differ from other studies of cash assistance programs that had more universal policy designs.

Key terms: Temporary Assistance for Needy Families, Aid to Families with Dependent Children, Cash Assistance, Poverty Rate, Anti-Poverty Programs.

Introduction

Temporary Assistance for Needy Families (TANF) was created as a result of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act and replaced the previous welfare program of Aid to Families with Dependent Children. While Aid to Families with Dependent Children was solely cash assistance, the block grant received by the states for TANF can be spent on any of these four purposes: (1) Providing aid to families in need (2) reducing dependency by promoting work and marriage (3) preventing out-of-wedlock pregnancies; and (4) bolstering and preserving two-parent families (Center on Budget and Policy Priorities, 2022).

As a result of the first purpose, TANF is a pivotal program for helping those in poverty. People are considered to be in poverty when they fall below the Official Poverty Measure (OPM). The OPM is set at three times the cost of a minimum food diet in 1963 adjusted yearly for inflation and differs based on family size. Data on state poverty rates for this paper will be drawn from the Census Bureau which calculates the poverty rate annually (Institute for Research on Poverty).

As part of the design of TANF, there are many categories states may spend their funding on. Basic or cash assistance is one of these categories and is the focus of this paper. Cash assistance is when the government sends cash to eligible families monthly. TANF cash assistance is different from other American anti-poverty programs, like the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), in that the aid received by families is unrestricted and can be spent on whatever the family needs, making it very useful for families in poverty. This paper draws on data from the Department of Health and Human Services which keeps track of TANF expenditures.

TANF has a basic structure set by the federal government that is fairly restrictive, with time limits on the aid, and work requirements to receive the aid. States then have broad powers to set eligibility for receiving aid based on income and assets. Families in every state are required to be well below the poverty line to receive aid (Center on Budget and Policy Priorities, 2022). States also have broad discretion over the benefit amount that families receive, and across most states, it is a very low amount that keeps families below the poverty line (Center on Budget and Policy Priorities, 2022).

Recently, there has been an exploration of cash assistance programs in the United States. On the local level, several organizations have run pilot cash assistance programs and have seen great results, such as SEED in Stockton, California, and the Magnolia Mother's Trust in Jackson, Mississippi (West et al., 2021; Moore et al., 2022). There have also been efforts on the federal level with the expanded Child Tax Credit that provided monthly payments to families with children (Center on Budget and Policy Priorities, 2022). The stimulus checks sent out during the COVID-19 pandemic to provide aid to those out of work proved effective at reducing poverty (Wheaton, Giannarelli, Dehry, 2021). TANF work requirements, time limits, and low income limits are in stark contrast to these universal or near-universal programs (Center on Budget and Policy Priorities, 2022). Thus, seeing if TANF can still perform well as a cash assistance program with its restrictions will give insight to policymakers on how welfare programs should be designed.

This paper explores the relationship between TANF spending on basic assistance by a state and the state's poverty rate. This paper hypothesizes that states with a higher percentage of TANF spending on cash assistance will be more likely to have a lower poverty rate than will those having a lower percentage of TANF spending on cash assistance. This paper first examines

the existing literature on TANF spending variability by state, poverty rate variability by state, and how effective social safety net programs are. In the literature we find that the effect of state variability in TANF spending on poverty is not explored, TANF has not been examined on its own as a social safety net program, nor has TANF been assessed in periods of economic prosperity. This paper aims to fill this gap by evaluating the relationship between a state's TANF spending on basic assistance on its poverty rate using data in a time of economic prosperity. Then, the paper lays out the study design, theory, and expectations for the test conducted. Lastly, the paper examines the results that no relationship exists between the two variables and discusses potential conclusions and policy implications that can be drawn from those results, as well as suggest future avenues for research to refine the conclusions.

Literature Review

After examining the literature around TANF spending variability, state poverty rate variability, and the effectiveness of welfare programs, it becomes evident that there are some gaps in the literature that this paper aims to fill. The literature does not examine the effect of variability in state spending for cash assistance on poverty or income stability. Furthermore, the literature around social safety net programs does not look at TANF on its own, apart from other programs, nor does it examine the effectiveness of TANF during periods of economic prosperity. Finally, the literature around state poverty rate variability would seem to suggest that cash assistance would be the most effective method of reducing the poverty rate, yet this hypothesis has never been fully tested.

State Variation in TANF Expenditures on Cash Assistance

TANF replaced Aid to Families with Dependent Children after the passage of the Personal Responsibility and Work Opportunity Reconciliation Act and changed the structure of the American welfare system. Under TANF, states received a block grant from the federal government based on their previous spending under Aid to Families with Dependent Children. States are required to spend at least 75% of what they had spent annually under Aid to Families with Dependent Children to ensure they continued to support welfare programs (Rodgers & Tedin, 2006, 745). Though it is often thought of as just a cash assistance program, states can spend this money on up to 20 different categories of spending defined by the federal government, such as child care assistance, work education and training, and programs to prevent out-of-wedlock pregnancies (Ha et al., 2022, 444). Thus, states vary greatly in TANF spending as each state can decide how much it wants to spend per capita, as there is no federal minimum on per capita TANF spending and the federal government does not adjust grants to states with changing caseloads (Rodgers & Tedin, 2006, 757-758).

However, this structure only describes how, not why, it is possible for TANF spending to vary by state. TANF was part of an effort for welfare reform that was based on racist tropes of welfare fraud (Fusaro, 2021a, 816). During his presidency, Ronald Reagan pushed the idea of a "welfare queen," a Black woman who has taken advantage of the welfare system for her gain (Demby, 2013). This negative stereotype influenced people's opinions, specifically white people, and pushed them to support policies and spending meant to keep racial minorities from receiving cash aid (Fusaro, 2021a, 816).

Consequently, existing research has found that the racial makeup of a state affects how a state spends its TANF grant. Rodgers and Tedin (2006) conducted a study that examined a variety of

social and economic factors on a state's tax effort to fund TANF and found that states with a greater proportion of African-Americans tend to keep per capita TANF spending relatively low (Rodgers & Tedin, 2006, 758). A recently published study by Fusaro (2021) similarly concluded that states where the white population has a negative bias toward the Black population tend to direct less of their TANF spending toward cash assistance (Fusaro, 2021a, 830). Hardy, Samudra, & Davis's (2019) study supports Fusaro's (2021) findings, concluding that states where Blacks make up a larger proportion of the TANF caseload were also found to have a lower level of cash assistance spending (Hardy, Samudra, & Davis, 2019, 317-318).

With this variability in state TANF spending on cash assistance, there is concern over its effectiveness at fighting poverty as well as its ability to assist during economic downturns. Cash assistance spending tends to be higher when unemployment is higher within a state but the effectiveness of the response is unknown (Fusaro, 2021b, 164). With states that spend less on cash assistance having a higher population of Blacks as well as other minorities, there are concerns over whether these people can receive the necessary amount of assistance during economic downturns (Fusaro, 2021b, 164). While the factors of state variability in TANF spending on cash assistance have been studied, the effects of this variability on poverty and other economic conditions have not been examined.

State Poverty Rate Variability

The differences in state poverty rates have been examined by different authors who have noted several factors that may explain such variations. Rodgers, Payne, and Chervachidze (2006) utilized a variety of models and variables to explain differing state poverty rates post the 1996 welfare reform law. The authors concluded that states with the greatest tax bases, the greatest per capita income, and ample TANF benefits had lower poverty rates (Rodgers, Payne, & Chervachidze, 2006, 674). Although TANF spending and other aspects of welfare reform were evaluated, no firm conclusions could be drawn, as the law was still relatively new at the time (Rodgers, Payne, & Chervachidze, 2006, 675). This leaves room in the existing literature to reexamine TANF spending and its impact on state poverty rates.

Laird et al. (2018) looked at state poverty through a prevalence-penalty framework that was developed by other authors to examine different poverty rates between countries. "Prevalence" was defined as the existence of certain poverty risk factors in a state, whereas "penalty" meant the increased risk of poverty as a result of experiencing one of these factors. In the study, researchers singled out the specific risk factors of low education, single motherhood, young heads of households, and unemployment used by the original authors. They also looked at the factors of having a Black head of household or having a Hispanic head of household, citing the United States' unique racial demographics. It was found that the prevalence of these risk factors was more closely related to higher poverty than was the penalty of these factors. Additionally, the "penalty" for being Black or Hispanic was substantial across all states. A cost-of-living adjustment was also introduced that demonstrated that places with higher costs of living tended to have a higher poverty rate (Laird et al., 2018, 630, 633, 645).

As a result, these authors suggest that states could reduce poverty by focusing on reducing the cost-of-living penalty, as opposed to reducing the risk factors (Laird et al. 2018 647). This would suggest that cash assistance could be more effective at reducing poverty as opposed to other TANF categories or programs that focus on encouraging marriage and avoiding single motherhood.

Effect of Welfare Programs on Economic Conditions

Welfare programs have been studied in depth for their effectiveness in improving economic conditions and providing aid during economic downturns. Rodgers and Payne (2007) conducted a study that examined the effect of different factors on a state's child poverty rate, welfare reform being one such factor, and found that states with greater inclusivity, generosity, and better-quality welfare programs had lower child poverty rates (Rodgers & Payne, 2007, 13).

The impact of specific programs has also been evaluated. In another study that examined the poverty-reducing effects of social security and means-tested programs, it was found that SNAP and the Earned Income Tax Credit (EITC) had the largest reduction effect on the poverty rate among means-tested programs. Social Security was found to have the greatest effect on reducing the poverty rate and all programs, other than the EITC, reduced deep poverty, defined as making less than 50% of the federal poverty line (Meyer & Wu, 2018, 1147).

TANF has also been studied for its impact on economic conditions and for its ability to provide aid during economic downturns. These studies have looked at TANF both in combination with other programs, as well as on its own. A study that looked specifically at the impact of income stability and the social safety net during recessions found that transfer programs as a whole were effective at reducing income instability (Hardy, 2016, 327). These programs, TANF, Unemployment Insurance (UI), SNAP, and the EITC, were examined collectively, so the individual impact of each program on income stability is not clear (Hardy, 2016, 313). Bitler and Hoynes (2016) concluded that the most disadvantaged Americans were impacted by the great recession more than expected because TANF was not as responsive as other programs (Bitler & Hoynes, 2016, 5405). Unlike Hardy (2016), this study did not look at income stability.

What is missing from these studies is the impact of TANF spending on state poverty rates, specifically. Additionally, these studies have looked at the effect of TANF and other programs during large economic downturns, and not during more stable economic times. Looking at TANF on its own and during periods of economic stability would indicate which policy designs work best to improve economic conditions.

Summary of Research

Rodgers and Tedin (2006), Hardy, Samudra, and Davis (2019), and Fusaro (2021a) show racial attitudes and, consequently, racial makeup, as the causes of variability in state TANF spending on cash assistance as well as general TANF spending and policy. Rodgers, Payne, and Chervachidze (2006) conclude that variability in state poverty rates is due in part to better state economic conditions and TANF benefits. Laird et al. (2018) note the prevalence of certain risk factors and high cost of living as another explainer. Lastly, Rodgers and Payne (2007) point to more inclusive and generous welfare programs being more effective at reducing child poverty, with Meyer and Wu (2018) and Hardy (2016) noting the effectiveness of specific programs like SNAP, EITC, and Social Security. The literature does not examine the effect variability in TANF spending has on poverty as well as fails to assess TANF as a standalone program during economic prosperity. This paper aims to fill this gap by examining state TANF spending on basic assistance and the state's poverty rate during a time of economic prosperity.

Study Design

Theory and Expectations

This study hypothesizes that in comparing states, those having a higher percentage of TANF spending on basic/cash assistance will be more likely to have a lower poverty rate than those having a lower percentage of TANF spending on basic/cash assistance. The null hypothesis for this study is that in comparing states, those having a higher percentage of TANF spending on basic/cash assistance will be no more likely to have a lower poverty rate than those having a lower percentage of TANF spending on basic/cash assistance.

In a study of state poverty variability, Laird et al. (2018) examined the prevalence of certain risk factors that are tied to poverty as well as the resulting penalty of an individual having those factors. Though they found that a higher prevalence of these risk factors correlated to higher poverty rates, they added a cost-of-living adjustment to their study. They found that places with a higher cost of living tended to have higher poverty rates. As a result of this finding, they suggested a policy solution for states would be to reduce the cost of living rather than reduce the prevalence of the risk factors (Laird et al., 2018). This would lend credence to the idea that the more a state spends on cash assistance, the lower the poverty rate of the state would be.

We can get beyond a theoretical basis for this assumption as a study by the Urban Institute explored the impact of expanded pandemic benefits on poverty on a national level. The study found that the poverty rate was expected to be 23.1% without any support programs like Unemployment Insurance, government means-tested programs, stimulus payments, state payments, and the advanced child tax credit. The poverty rate was reduced to 7.7% as a result of all these programs, reducing expected poverty by 67% and keeping 50 million people out of poverty. Further, the study found that the stimulus payments kept 12.4 million people out of poverty on their own, having the greatest anti-poverty effect of any program (Wheaton, Giannarelli, and Dehry, 2021).

Moreover, an experiment with a guaranteed income was done in Stockton California by Stockton Economic Empowerment Demonstration (SEED). 125 residents of the city were given $500 a month for 2 years. They found that income volatility was reduced, recipients were healthier, and financial scarcity was alleviated. Interestingly, the income allowed participants to find full-time employment. A common refrain of opponents of guaranteed income programs is that giving people direct aid will reduce their incentive to work, which this program's findings refute (West et al., 2021). These findings would suggest that direct cash payments are the most effective at reducing poverty and that states that spend more on cash assistance will have lower poverty rates.

Operationalization and Measurement of Concepts

For this study, the independent variable is the percentage of TANF expenditures spent on basic assistance. This data is taken from HHS' annual data on TANF expenditures. This study will use data from the year 2018 because it is the most recent data available that would not be affected by the pandemic. The pandemic may have caused states to change how much they spend on basic assistance and would not be reflective of their normal spending habits which is what the goal of the study is. Additionally, with all the extra programs that were instituted as a result of the pandemic, the antipoverty effect of TANF could be clouded. The percentage of spending on basic assistance will be taken from the box that calculates the category of spending as a percentage of the total funds used for each state.

The dependent variable in this study is the state's poverty rate. This data is taken from the Census Bureau's historical poverty tables. Specifically, this study will get data on 2019 poverty rates from "Table 19," which calculates the number of poor people and poverty rates by state from 1980 to 2021 (Department of Commerce). Like the independent variable, this year was chosen to ensure that the impacts of the pandemic are not present. The percentages will be taken from the "percent in poverty" column for each state in the 2019 section.

This study takes inspiration from an older study by Rodgers Jr., Payne, and Chervachidze (2006) that attempted to look at the impact of the newly created TANF program on state poverty rates. This study was chosen as a model because it suggested in its conclusion that updated data would be needed to provide more conclusive results regarding TANF spending on basic assistance and state poverty rates (Rodgers Jr, Payne, and Chervachidze, 2006, 675). Thus, this paper aims to provide updated data in this study to see if similar results are shown.

Research Design
This study uses regression analysis and calculates the correlation between the two variables: the percentage of TANF expenditure spent on basic assistance by state and the state's poverty rate. A regression analysis was chosen because the two variables are interval variables. The study will use an original dataset that compiles the data of the two variables. The study has 51 cases, as it includes all 50 states and the District of Columbia in both variables.

If the relationship between the two variables is found to be significant, then a negative relationship between the percentage of TANF expenditures a state spends on basic assistance and the state's poverty rate would be expected. This would suggest that direct cash assistance is the most effective way a state can fight poverty and support the findings of guaranteed income experiments. It would also encourage policymakers to focus on direct cash assistance as a tool to reduce poverty instead of the many other theories suggested by policymakers.

Conversely, if the results show an insignificant relationship or perhaps a weak significant relationship, it would suggest that the policy differences of TANF are significant. A key difference between TANF and these other cash assistance programs is the fact that these other programs are universal, meaning that nearly everyone receives or can receive the benefits. In contrast, TANF has many restrictions on receiving benefits (Center on Budget and Policy Priorities, 2022). This would suggest that universal programs are the most effective and that these programs should be the policymakers' focus.

Analysis and Conclusion
Results and Analysis
Examining the state poverty rates first, there is some consistency between the literature on state poverty rates and the actual numbers. New Hampshire, having the lowest poverty rate, boasts the highest TANF benefit ($1,039 for a family of three in March of 2018) and 9th in per capita income at $41,241 in 2019 (Burnside, 2018; Department of Commerce, 2019). In Contrast, Mississippi has the lowest benefit of $170 for a family of three as well as the lowest per capita income in 2019 at $25,301 (Knowles et al. 2022; Department of Commerce, 2019). Rodgers, Payne, and Chervachidze (2006) concluded that states with high TANF benefit amounts and high per capita income would have lower poverty rates which is borne out by the data.

Additionally, assessing the percentage of spending on basic assistance, there is some consistency between the literature and the data. For Arkansas, the state had a fairly high

percentage of Black people on their TANF caseload in 2018 at 49.7% (Department of Health and Human Services, 2019). Kentucky on the other hand had a fairly low percentage of Black people on their TANF caseload in 2018 at 20.8% (Department of Health and Human Services, 2019). Though not as clear as state poverty rates, there does seem to be some consistency between the literature on state TANF spending and the data. Hardy, Samudra, & Davis (2019) concluded that states with a higher proportion of African-Americans on their TANF caseload tend to spend less on cash assistance.

Table 1: Descriptive Statistics of Independent and Dependent Variable

	Percentage of TANF Expenditure allocated to Basic Assistance 2018	State Poverty Rate 2019 (Percent)
Mean	19.77%	10.23%
Median	15.90%	9.70%
Standard Deviation	13.28%	2.99%
Minimum	2.50% (Arkansas)	3.70% (New Hampshire)
Maximum	65.80% (Kentucky)	19.20% (Mississippi)

The initial test that was conducted was to determine the correlation between the two variables and the statistical significance of the relationship. Table 2 shows the results of the correlation and statistical significance test run between the independent and dependent variables.

Table 2: Correlation and Statistical Significance

		State Poverty Rate 2019 (Percent)	Percentage of TANF Expenditure allocated to Basic Assistance 2018
State Poverty Rate 2019 (Percent)	Pearson Correlation	1	.021*
	Sig. 2 tailed		.886
	N	51	51
Percentage of TANF Expenditure allocated	Pearson Correlation	.021*	1

to Basic Assistance 2018	Sig. 2 tailed	.886	
	N	51	51
* Correlation not significant at the 0.10 level (2 tailed)			

As shown by the table, the relationship between the two variables is not statistically significant. This test used a significance level of $p < 0.10$ and the p-value for the correlation test was .886. A significance level of $p < 0.10$ was used due to the small sample size of 51. This means that under the assumption the null hypothesis is true, we would obtain a correlation coefficient of .021 by chance 88.6% of the time. As a result, we fail to reject the null hypothesis that in comparing states, those having a higher percentage of TANF spending on basic assistance will be no more likely to have a lower poverty rate than those having a lower percentage of TANF spending on basic assistance. Since the correlation test did not yield statistically significant results, a linear regression was not run on the two variables. The data shows that the variables aren't related in the way they were hypothesized in the research hypothesis nor are they related in any way according to the data. The results suggest that the amount a state allocates of its TANF money towards basic assistance has no relationship to the state's poverty rate.

These results fit with the study previously conducted by Rodgers Jr., Payne, and Chervachidze (2006) that looked at state spending of TANF expenditures on basic assistance and the resulting impact on state poverty rates. The authors previously thought that not enough time had passed since the adoption of TANF for the impact on state poverty rates to be seen in data (Rodgers Jr., Payne, and Chervachidze, 2006, 675). This study was done to provide the updated data that was called for in their study to see if anything has changed. However, these results suggest that their initial findings were correct and no amount of time would affect the results.

Though these are interesting results, there are certainly drawbacks to the experiment. First, the experiment takes a macro view of TANF spending on basic assistance and state poverty rates. This does not take into account any differences between the states in how they administer TANF such as the benefit amount or the income eligibility. Additionally, the demographics of each state are not tested or controlled for in this study. Due to the small sample size, controlling for certain variables was not possible. Thus, this experiment takes a broad view of this issue and further research can be taken to refine the conclusions.

Conclusion

The findings of this study are contrary to what one might expect based on the theory suggested in the literature around state poverty rate variability, as well as previous pilots for cash assistance programs. The findings by Laird et al. (2018) suggest that a cost-of-living penalty was the best predictor of poverty in a state and that cash assistance could be used to reduce poverty. One may have expected higher cash assistance spending by a state to decrease poverty if the main factor was a higher cost of living. However, this study found no such relationship. This could be explained by the structure of TANF rather than by the effectiveness of cash assistance as a whole. If the benefit is not received by those in need, then it cannot reduce the cost-of-living burden. Additionally, if the benefit provided by the program is inadequate, then it would not be able to effectively relieve the cost-of-living burden. (Laird et al., 2018).

TANF presents an interesting policy design compared to other cash assistance programs that have been studied. These other programs were universal in nature, meaning that they have few or no restrictions on who can receive assistance. Examples of these programs include pandemic stimulus checks and small guaranteed income experiments in local jurisdictions such as Stockton, California (Wheaton, Giannarelli, Dehry, 2021; West et al., 2021). In contrast, TANF is fairly restrictive with time limits for receiving aid, work requirements, and extremely low income eligibility (Center on Budget and Policy Priorities, 2022). States have broad discretion over the benefit amount that families receive, and across most states, it is a very low amount that keeps families below the poverty line (Center on Budget and Policy Priorities, 2022).

This difference in policy structure could be an explanation for the differing results we see between this study and other studies done on other cash assistance programs. These universal programs reduced poverty because they were able to reach more people and provide a suitable benefit to aid families. In contrast, TANF's restrictions prevent those who need assistance from receiving it. On top of that, the benefit amount that is received is not adequate to lift families out of poverty.

The findings of this study lend themselves to interesting policy implications for anti-poverty and social welfare policy for all levels of government. The previous literature suggested that providing more direct aid in the form of cash would lead to a decrease in the poverty rate. Therefore, states that spend more on cash assistance should have lower poverty rates than those that do not spend as much on cash assistance. However, because the findings of this study showed that there was no statistically significant relationship between the amount of TANF funds a state allocates towards basic assistance and its poverty rate, it suggests that the structure of the TANF program itself is the reason that poverty rates remain unaffected.

If this is the case, it would provide important insight to policymakers as they craft cash assistance programs. Policymakers should ensure that the administration of their chosen program allows for those who are in need, such as those below the poverty line, to receive the program's aid. Additionally, policymakers should ensure that the benefit amount is great enough to truly bring families out of poverty. Currently, the median benefit amount for TANF is $498, or 27% of the federal poverty level (Center on Budget and Policy Priorities, 2022). It would seem then that policymakers are not setting an adequate benefit amount for recipients. Low benefit amounts could be an explanation for the lack of effect on poverty rates.

Further research should be conducted to confirm if the difference in a cash assistance program's effectiveness is in the administration of the program or the benefit amount of the program or a combination of both. One limitation of this study is that it looks at TANF from a broad view of just how much is allocated towards cash assistance and does not consider each state's administration of cash assistance. Future research should look to either control for a state's restrictiveness in its TANF program and benefit amount or see if they are better predictors of a state's poverty level as independent variables.

The results of this study do fit into other research and claims about TANF's ineffectiveness as an anti-poverty program. Some of the main issues found with TANF are what could be the reason for the difference between the findings in this study and those of other studies of programs of cash assistance, administration, and benefit amount. TANF only reached 21% of families with children in poverty in 2020. TANF's median monthly benefit amount is $498, 27% of the federal poverty level. (Center on Budget and Policy Priorities, 2022). With all of that, the findings of this

study, that the amount a state allocates of its TANF funding towards cash assistance has no significant relationship with its poverty rate, is not so surprising.

Thus, though this study is limited due to its simplicity, the findings would suggest that cash assistance programs need to be less restrictive and have adequate benefit amounts to reduce poverty rates. It would also suggest that TANF needs to be reformed to be less restrictive and have higher benefit amounts if it is going to be effective as our main cash assistance program in the United States. Further research should examine the relationship between the state administration of TANF cash assistance, the actual benefit amount each state provides, and the state's poverty rate. This can determine if they are better predictors of state poverty rates as well as if they explain the differing results observed here about cash assistance.

Appendix

Figure 1: Descriptive Data for the Percentage of TANF Expenditures Towards Basic Assistance by state in 2018 and State Poverty Rate in 2019

		Pov_Rate_19	TANF_Exp_Basic_18
N	Valid	51	51
	Missing	0	0
Mean		10.2333%	19.7725%
Median		9.7000%	15.9000%
Std. Deviation		2.98501%	13.28536%
Minimum		3.70%	2.50%
Maximum		19.20%	65.80%

Figure 2: Correlation and Statistical Significance Test for the Percentage of TANF Expenditures Towards Basic Assistance by state in 2018 and State Poverty Rate in 2019

		Pov_Rate_19	TANF_Exp_Basic_18
Pov_Rate_19	Pearson Correlation	1	.021
	Sig. (2-tailed)		.886
	N	51	51
TANF_Exp_Basic_18	Pearson Correlation	.021	1
	Sig. (2-tailed)	.886	
	N	51	51

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FINDING COMMUNITY AFTER INCARCERATION: THE IMPACT OF COLLATERAL CONSEQUENCE LAWS ON WOMEN IN URBAN AND RURAL ENVIRONMENTS

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Abstract

As female incarceration rates increase across the country, more women than ever before are dealing with collateral consequence laws that impact how they are able to reintegrate into their communities after incarceration. Understanding how these laws impact women is instrumental for legislators attempting to reform the laws and for organizations offering support to these women. This research attempts to determine if women in rural and urban environments are impacted by collateral consequence laws differently. To accomplish this, this project conducts a case study analysis comparing two states, one urban and one rural, that have similar collateral consequence laws: New Jersey and North Dakota. By comparing the recidivism, homelessness, and housing rates of female ex-offenders as well as their personal experiences collected through a newspaper search and interviews with reentry service employees, this project presents evidence that women in urban areas are more impacted by collateral consequence laws than women in rural areas.

Keywords: Incarceration, women, rural-urban divide, community reentry, female incarceration, collateral consequence laws, comparative analysis

Introduction

When individuals are faced with a prison or jail sentence, they often do not realize just how long that punishment might last; long after they have served their time, ex-offenders still have to deal with collateral consequence laws (Tripkovic 2017). Collateral consequence laws are laws that impact offenders after they have served their sentence, often following them for their entire lives. These laws can impact formerly incarcerated individuals in almost every facet of their lives; they range from felon disenfranchisement, to preventing those convicted of drug crimes from applying for TANF or SNAP benefits, to prohibiting ex-offenders from applying for certain professional licenses (Travis 2002). The sheer scope of these laws means that they have an immense impact on the lives of formerly incarcerated individuals, making it incredibly difficult for them to reenter their communities after serving their sentence (Hoskins 2014).

Recently, collateral consequence laws have been getting a lot of attention, as many activists have urged states to loosen ex-offender restrictions, arguing that they are too harsh (Beitsch 2017). While these laws impact all formerly incarcerated individuals, they are especially damaging to women, who often rely on a lot of the services that collateral consequence laws concern (McConnell 2017). While overall incarceration rates across the country are slowing down, incarceration rates for women, , as well as concerns around incarceration and the impact of collateral consequence, are increasing ("Incarcerated Women and Girls" 2020). Specifically, it seems like the states with the highest levels of female incarceration (Idaho, Oklahoma, Kentucky, South Dakota, and Wyoming) tend to be more rural, while states with the lowest levels of female incarceration (Massachusetts, Rhode Island, New Jersey, New York, and Maine) tend to be more urban ("Incarcerated Women and Girls" 2020). While this data cannot be used to make any strong conclusion, it does seem to imply that rural areas have higher levels of female incarceration than urban areas; more incarcerated women means more women facing collateral consequences.

This brings up an important question, do collateral consequence laws affect women differently in rural and urban environments? Incarceration looks very different in rural and urban areas (Eason, Zucker, and Wildeman 2017), so collateral consequences will likely have very different impacts on women living in rural and urban areas since woman in urban areas rely more on the welfare programs that collateral consequence laws impact (Allard 2004). This paper will attempt to determine if collateral consequences impact women in rural and urban spaces differently and how this might impact the rate of female re-incarceration. I predict that women in urban environments will face more challenges brought on by collateral consequence laws, making it more difficult for them to reintegrate into their communities after incarceration. To test this hypothesis, I will analyze quantitative data on recidivism, housing, and homelessness for female ex-offenders, as well as qualitative data on the experiences of women returning to their communities that I collect from newspapers and interviews with workers at reentry organizations.

Literature Review

The body of research focusing specifically on incarcerated women is growing, although a lot of it is relatively recent, as many past scholars ignored the unique ways women interact with the criminal justice system. Recent research has begun to fill this gap by analyzing the experiences of women and girls who have been incarcerated or been involved with the criminal justice

system in some other way. This work is especially timely, as the incarceration rate for women and girls has been climbing steadily and the number of incarcerated women and girls has increased by 700% since 1980 ("Incarcerated Women and Girls" 2020). While this body of research is quickly growing and is far more well analyzed than it was a few years ago, it is still a relatively new topic of analysis and there are many gaps left to be filled.

One specific area that has not been analyzed deeply yet is how collateral consequence laws impact women in urban and rural areas differently, which is what my paper will focus on. While there is a lack of research on this specific topic, there is research on the connecting topics that I will rely on to guide my research. Specifically, I will build my research off past research done on the impact of collateral consequence laws, the challenges incarcerated women face, and the urban-rural divide in incarceration.

Mass Incarceration and Collateral Consequences

In recent years there has been a large increase in the amount of research surrounding collateral consequence laws, but before the early 2000s there was a clear lack of such research. In 2002, Jeremy Travis coined the term "invisible punishments" to refer to the "the laws and regulations that serve to diminish the rights and privileges of those convicted of crimes" after they have served their sentence (Travis 2002, 16). In this essay, he argued that invisible punishments are specifically designed to exclude ex-offenders from public life, isolating them from the communities they are seeking to return to and making it more difficult for them to return to their lives before incarceration. These laws often impact "public housing, welfare benefits, the mobility necessary to access jobs that require driving, child support, parental rights, the ability to obtain an education, and, in the case of deportation, access to the opportunities that brought immigrants to this country" which makes it far harder for ex-offenders to reintegrate into their communities after incarceration by eliminating the social safety net they often rely on (Travis 2002, 18).

Travis expanded on this term in 2005, arguing that what makes these punishments so devastating for formerly incarcerated individuals is the fact that they are invisible (Travis 2005). Because these laws exist outside of the traditional criminal justice system, many, including those impacted by them, do not even realize they exist. This makes it far more difficult for individuals involved in the criminal justice system to make educated decisions, because they may not understand the full impact of those decisions on their futures. For example, someone may decide to take a plea deal rather than going to court, thinking it will be quicker, not realizing that there are collateral consequences that may be associated with the deal that they could avoid if they were found not guilty in court. Furthermore, since many do not know about the existence of these laws, they are not included in the discussion of mass incarceration, giving legislators unbridled power to expand the reach of these laws without any outside intervention. Travis best explains the enormous risk these laws hold by stating that "this universe of criminal sanctions has been hidden from public view, ignored in our national debate on punishment policy, and generally excluded from research on the life course of ex-offenders or the costs and benefits of the criminal sanction" (Travis 2005, 64).

Travis's research brought the impacts of collateral consequence laws into focus and lead to a dramatic increase in research on invisible punishments. Michelle Alexander is one of the first to expand on Travis's work in her book The New Jim Crow (Alexander 2012). In this work, Alexander uses a racial lens to analyze the impacts of invisible punishments specifically on

Black offenders. She argues that the current impact of these laws on Black people mimics the impacts that Jim Crow laws had on Black people until 1964. Although these laws are not explicitly racist, since Black people are far more likely to be incarcerated, their impacts disproportionately impact Black people and should be analyzed with race in mind. Later, Wheelock continued Alexander's analysis on the impact of collateral consequences on Black men, determining that the system of collateral consequences helps to maintain racial inequality (Wheelock 2005)

A lot of analysis surrounding collateral consequences focuses on the constitutional and legal interpretations of these laws. Ben Geiger, began this course of analysis in 2006, finding that current constitutional interpretations allow collateral consequences to stay in law books despite their devastating consequences for many ex-offenders because ex-offenders are not considered a suspect class in need of additional constitutional protections. Geiger argues that ex-offenders should be granted additional protections based on the mistreatment they undergo while incarcerated. He also contends that returning to prison is already difficult since many ex-offenders lose years or even decades with their families and in their communities that they can never get back and that piling on additional challenges after incarceration should be considered cruel and unusual punishment under the Eighth Amendment (Geiger 2006).

Christopher Bennett (2017) approaches the debate around collateral consequences from a new light. He argues, like Geiger, that collateral consequences are wrong, but not because they cause harm to individuals. Bennet argues that a decision maker may have to make a choice that will cause harm to one individual in order to protect others, so collateral consequence laws are understandable from this view (Bennett 2017). The core of his argument rests on the idea that ex-offenders and citizens are in a relationship that requires citizens to take steps to alleviate the harms that ex-offenders face. In essence, it is not society's responsibility to completely eliminate harm, but to support people when they face it (Bennett 2017).

Shifting from constitutional interpretations of these laws, in 2014, Zachary Hoskins conducted an in-depth analysis of the impacts of collateral consequences on ex-offenders to determine if these laws are effective. He finds that collateral consequence laws are not unique to the United States but the U.S.'s are far more pervasive than those in other countries. Because these laws are not part of criminal codes and are not considered punishments by the court, there is almost no constitutional limit to what these laws can concern, so they can have extreme impacts on the daily lives of ex-offenders and can even harm the communities they are returning to. Hoskins argues that these restrictions actively prevent many ex-offenders from establishing a place in their community, making them counter to the goal of reintegration (Hoskins 2014). Furthermore, Hoskins argues that while collateral consequence laws cause more harm than good and should be eliminated, if legislators decide they must exist, "such policies should be tailored as much as is feasible to avoid over-inclusiveness;" in other words, collateral consequence laws have to be very strictly tailored to ensure they do not affect more people than necessary (Hoskins 2014, 44).

More recently, in 2017, Gabriel Chin built on this research to propose a list of reforms to collateral consequence laws. She argues that currently, they are too difficult for both ex-offenders and legal professionals to understand and must be more specifically tailored to make them fair and just. She specifically recommends that collateral consequences should be: "(1) collected and published, so that defendants, lawyers, judges and policymakers can know what they are; (2) incorporated into counseling, plea bargaining, sentencing and other aspects of the criminal

process; (3) subject to relief so that individuals can pursue law-abiding lives, and regain equal status; and (4) limited to those that evidence shows reasonably promote public safety" (Chin 2017, 1). In a response to Chin's work, Milena Tripkovic focuses on Chin's last requirement, that collateral consequence laws should specifically be used to promote public safety, to determine if this requirement is underinclusive (Tripkovic 2017). Tripkovic finds that Chin's standard is effective in most cases, but argues that there may be "other possibly legitimate reasons to impose some of the collateral consequences that exist today" (Tripkovic 2017, 20).

Despite the growing scholarship discussing collateral consequences and how they make it more difficult for ex-offenders to reintegrate into society, there is a lack of empirical evidence supporting this claim. Tracy Sohoni attempts to support this claim with quantitative analysis by conducting a study comparing the rates of recidivism across states based on how restrictive the collateral consequence laws in those states are (Sohoni 2014). Sohoni ultimately found that there is a negative correlation between strictness of collateral consequence laws and recidivism, meaning that states with more restrictive laws had lower rates of recidivism. While this data was very surprising and seems to go against a lot of previous scholarship, it could mean that these laws discourage people from reoffending (Sohoni 2014). Despite this conclusion, Sohoni admits that she relies on aggregate not individual data, which could lead to flawed conclusions.

With the body of research surrounding collateral consequences growing, researchers are beginning to turn toward more specific topics of study. Recently, analysis concerning the impact of Covid-19 on collateral consequences has begun. Golembeski, Irfan, and Dong found that the Covid-19 pandemic has only exacerbated the problem of food insecurity that many formerly incarcerated individuals face, as thousands of offenders were released from prisons and jails to prevent the spread of Covid (Golembeski, Irfan, and Dong 2020). This research just stresses how impactful collateral consequence laws can be on ex-offenders and how important it is to continue to study these laws so we can understand exactly how ex-offenders deal with them.

Incarcerated Women and Girls

As mass incarceration has increased and research surrounding it has become more well-rounded, scholars have started to point out that women are often left out of the conversation. This realization has led to an increase of research focusing on the experiences of women and girls in the criminal justice system, but there is still a distinct lack of it. There is an assumption that incarceration and policing will impact women the same way it will impact men and that the criminal justice system is gender neutral, but this is not true. Saxena, Messina, and Grella were early to this conversation, finding that gender-responsive substance abuse treatment for incarcerated women can greatly help them recover from past trauma (Saxena, Messina, and Grella 2014). This study reveals how important it is for treatment both during and after incarceration to be specifically designed for women. Assuming that the criminal justice system is gender neutral can have devastating consequences for women.

Continuing research surrounding female incarceration covers a wide range of topics. Opsal analyzes how after release, women use employment and work not just as a way to provide financial stability, but to establish a post-incarceration identity and reintegrate into society (Opsal 2012). Using a survey of women in high-security prisons, Harner and Riley found that having trauma-informed care in prisons is imperative to protecting the mental health of incarcerated women (Harner and Riley 2013). In their analysis of data concerning pregnant women in prison,

Bronson and Sufrin find a significant lack of data and argue that tracking prison pregnancies is essential to ensuring incarcerated women get proper pre-natal care (Bronson and Sufrin 2019). A recent study found that after incarceration women tend to have more sexual partners, which could lead to increased risk of contracting STIs (Knittel et al. 2020). While focusing on different aspects of the female incarceration experience, all these studies indicate that incarceration cannot be assumed to be gender neutral.

Along with the increased research concerning incarcerated women, there has been an increased focus on how both race and gender impact incarceration. In 2012 Kimberlé W. Crenshaw was one of the first scholars to examine this relationship. She argued that the war on drugs forced many women and girls into the criminal justice system, making them the " fastest growing populations under criminal supervision" (Crenshaw 2012, 23). Yet, much of the discourse surrounding the criminal justice system, especially discourse that involves discussion of race, fails to consider how women are impacted by it. A lot of attempts to reform the system leave women, specifically Black women, out of the conversation, forcing them to fend for themselves in a system that is not designed for them. Along with Crenshaw's research, Dorothy Roberts also analyzed how over policing disproportionately impacts poor women of color (Roberts 2012). In her work, Roberts finds that the prison and foster care system "work together to maintain unjust social hierarchies in the United States" by punishing Black mothers (Roberts 2012, 1500).

Finally, and most relevant to this research, a few researchers have examined how collateral consequence laws specifically impact women. Torrey McConnell argues that research concerning the increasing number of incarcerated women that takes an intergenerational approach is paternalistic and fails to truly address the issues of increased female incarceration; in other words, by focusing on how female incarceration impacts children and families, researchers decenter women in their analysis (McConnell 2017). McConnell's (2017) analysis focuses on the fact that women are more likely to be convicted of "crimes of survival" than men. During the War on Drugs, the federal government passed legislation placing disproportionate collateral consequences on crimes of survival and since women are convicted of crimes of survival more often than men, they are more impacted by collateral consequence laws. In order to counter these impacts, McConnell proposes a comprehensive approach that includes "sentencing reforms, gender-focused treatment programs, employment legislation, access to public benefits, and community-based sentencing alternatives" (McConnell 2017, 493).

George Lipsitz continues this research by examining the intersections of collateral consequence laws, race, and gender (Lipsitz 2011). He finds that women of color are often forced to take plea deals when they are charged with a crime, which leads not just to incarceration, but collateral consequences that will have immense impacts on the rest of their lives. These women already face extra barriers when it comes to finding employment and housing, and these restrictions that they face after incarceration only make it more difficult for them to support themselves and their families (Lipsitz 2011). In order to respond to these issues, it is imperative that policies reforming collateral consequence laws consider both race and gender.

A lot of the unique challenges that women face during incarceration can also follow them as they return to their communities after they are released. Women returning to their communities often need gender responsive treatment and support to help them transition back into their communities (Berman 2005). The challenges that women face in reentry differ from those that

men face in many ways, Berman highlights a few: women are more likely to have a history of sexual and physical abuse, women deal with substance abuse and mental illness in unique ways, women are more likely to be economically disadvantaged, and women are likely to have to care for their children and families. Berman examines the experiences of women returning to their communities within five "basic life areas," subsistence/livelihood, residence, family/relationships, health/sobriety, and criminal justice compliance and in all these areas finds that women benefit from gender responsive services (Berman 2005).

Additionally, and most relevant to my research, Berman briefly touches on how women in rural and urban environments may need different types of support after incarceration. "Rural communities tend to have fewer housing options and other services and women are more likely to need to rely on family and friend networks to avoid homelessness. While that could be a positive development if the family is sufficiently healthy and supportive, it could also place a woman back in a situation that is either dangerous and/or conducive to relapse" (Berman 2005, 23). Berman posits that limited access to resources makes women in rural areas more reliant on support from their community, something I will examine further in my research.

The Urban Rural Divide of Incarceration

I will now shift slightly from looking at research concerning collateral consequence laws to examine what research has been done on crime in urban and rural spaces. There is currently a distinct lack of research analyzing how collateral consequence laws impact ex-offenders differently in rural and urban areas, and I hope to fill this gap in research with this study. Urban spaces are almost always associated with crime and are presumed to have higher rates of incarceration than rural areas, but recent data shows an increase in rates of incarceration, specifically jail incarceration are rising in rural areas (Henrichson and Fishman 2016). With this new data, many researchers began to take more of an interest in the impacts of incarceration in rural areas. Recent analysis has sought to understand what factors influence the different rates of incarceration in rural and urban spaces and has sought to understand how crime and incarceration may differ in these spaces (Eason, Zucker, and Wildeman 2017; Weiss Riley et al. 2018; Bonds 2009; Thorpe 2014; Simes 2018). While these authors do not agree on how exactly incarceration differs in rural and urban areas, they do agree that it does differ, and I will be examining these differences more in my work.

Other scholars still have looked at how mass incarceration impacts rural and urban communities, which will be most useful for my research since collateral consequence laws influence community reintegration. In his research specifically examining urban communities Nicholas Freudenberg found that community health is heavily tied to incarceration policies; he argues that supporting ex-offenders with community and social services will support reintegration and uplift the community as a whole (Freudenberg 2001). In another study concerning the health of incarcerated women, researchers found that women incarcerated in both rural and urban areas faced significant health problems, but that urban women reported higher levels of health service utilization (Staton-Tindall et al. 2007). Furthermore, rural women that used community services before incarceration had better mental health while incarcerated.

With the rate of female incarceration increasing, despite nationwide attempts to curb mass incarceration, it is incredibly important to study and understand how incarceration impacts women and girls. Specifically, understanding how collateral consequence laws will impact how

women exiting incarceration will interact with their communities is essential to limiting recidivism and promoting community reintegration. When analyzing the relationship between incarcerated individuals and their communities, it is also important to acknowledge that not all communities will be impacted the same ways, which is why this research will seek to understand why female incarceration tends to be higher in rural areas than urban areas and what these means for the women returning from prison and the communities they are returning to. Collateral consequence laws will most likely impact these women and their communities differently in these different settings and understanding these differences will make it possible to improve their reintegration into communities after incarceration.

Study Design

The goal of this research is to determine if similar collateral consequence laws impact ex-offenders differently in rural and urban environments. I predict that in comparing states with similar collateral consequence laws, women in those with predominantly urban communities will have more negative experiences returning to their communities than women in predominantly rural states. Since people in urban environments tend to rely more on many of the social services to which ex-offenders lose access to (Allard 2004), and access to these resources can be incredibly important for people returning from incarceration (Yang 2017), it will be more difficult for women in this environments to reintegrate into their communities. To test this hypothesis, I will be completing a case study comparing two states, one considered rural and one urban, with similar collateral consequence laws to determine how the urbanity of an environment impacts the experiences of formerly incarcerated individuals. The states I will be comparing are New Jersey and North Dakota, the table below summarizes the basic reasons for selecting these two states:

Table 1: Case Selection Comparison

Variable	Case 1: New Jersey	Case 2: North Dakota
Controls		
Poverty rate	9.98%	10.68%
Per capita income	$54,502	$53,219
Percent of families with children	42.95%	43.82%
Percent Single Female Headed Families with Children	8.84%	8.19%

Percent of population with high school degree or higher	90%	93%
Percent of population with bachelor's degree	24.24%	21.80%
Percent of population receiving SNAP benefits	8.05%	6.51%
Collateral Consequence Laws	Not harsh	Not harsh
Cause		
Hypothesis: State urbanicity	Urban	Rural
Predicted Outcome		
Experiences of women returning to their communities after incarceration	Women will have a more difficult time reintegrating into their communities. They will have higher recidivism rates, lower rates of employment, experience more housing insecurity, and find less support in their transition back to the community.	Women will have an easier time reintegrating into their communities. They will have lower recidivism rates, lower rates of employment, experience less housing insecurity, and find more support in their transition back to the community.

I will be comparing the post-incarceration experiences of women in these two states on three different levels. I will first look at recidivism rates among women in these two states to determine if they are able to establish a place in their community outside of incarceration. Second, I will examine the lives of women after incarceration by looking at housing and employment data. Finally, I will examine the personal experiences of women returning to their communities in these states to figure out how these women actually see collateral consequence laws impacting their lives. I predict that women in New Jersey (the urban state in my analysis) will have higher rates of recidivism, find less success in community supervision programs, and will all around face more challenges when returning to their communities than women in North Dakota.

Definition and Explanation of Variables

The vast majority of the control variables in this study are quantitative, have relatively simple operational definitions, and are taken directly from another source. Below is a table containing the source and definition for each control variables (except collateral consequence laws, which will be addressed later) to make it clear exactly what each variable is measuring:

Table 2: Operationalization of Control Variables

Variable	Source	Definition
Poverty rate	"Estimated Percent of All People That Are Living in Poverty as of 2015-2019." 2015	A person is considered in poverty if their family income is lower than their family threshold
Per capita income	"How Rich Is Each US State? | Chamber of Commerce" 2021	2018 state GDP divided by 2018 state population
Percent of families with children	"Estimated Percent of All Families That Have Children, between 2015-2019." 2015	"Estimated percent of families that are living with their own children, between 2015-2019. A family consists of a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption."
Percent Single Female Headed Families with Children	"Estimated Percent of All Families That Are Single Female Headed with Children, between 2015-2019" 2015	"Estimated percent of families that are single female-headed families (female households with no husband present) with own children, between 2015-2019."
Percent of population with high school degree or higher	"Educational Attainment by State 2022" 2022	Percent of state population that has received at least a high school degree
Percent of population with bachelor's degree	"Estimated Percent of People with a Bachelor's Degree, between 2015-2019." 2015	"Estimated percent of population 25 years and older with a Bachelor's degree, between 2015-2019."
Percent of population receiving SNAP benefits	"Percent of Population That Received Food Stamps in July 2018" 2018	The number of Food Stamp recipients in July 2018 divided by the Census Population Estimate.

The final control variable, and arguably the most important for this analysis, collateral consequence laws in the states, is more complicated than the other variables. Since each state has

hundreds of pieces of legislation that impact collateral consequences for ex-offenders, it is difficult to easily condense down into one variable, but for this study, I am going to try. The basis for this variable is the ranking system created by the Collateral Consequence Research Center (Love and Schlussel 2020). This system ranked every states collateral consequence laws based on nine factors: (1) loss and restoration of voting rights (2) pardon (3) felony expungement, sealing & set-aside ("felony relief") (4) misdemeanor expungement, sealing & set-aside ("misdemeanor relief") (5) non-conviction relief (6) deferred adjudication (7) judicial certificates of relief (8) employment and (9) occupational licensing (Love and Schlussel 2020). In this system, New Jersey was ranked 12th and North Dakota was ranked 10th.

This scorecard considers barriers when it comes to voting, employment, and access to records, all very important aspects of collateral consequence laws, I also wanted to ensure that the two states have similar laws about access to welfare programs like Temporary Assistance for Needy Family (TANF) and the Supplemental Nutrition Assistance Program (SNAP). Looking at the North Dakota and New Jersey statues surrounding access to TANF and SNAP, they both place similar restrictions on the programs. Under New Jersey law, previously incarcerated individuals are not eligible for TANF or SNAP and those convicted of drug felonies must undergo additional treatment before they can be eligible again (N.J. Admin. Code § 10:87-11.2, N.J. Admin. Code § 10:90-18.6, N.J. Admin. Code § 10:90-2.8). Similarly, the North Dakota statutes ban participation in TANF and SNAP while incarcerated and impose more strict rules on those convicted of drug crimes, banning them from receiving support for seven years after their last felony conviction, with some exceptions (ND Admin Code § 75-02-01.2-79, ND Admin Code § 400-19-45-95-10, ND Admin Code § 430-05-75-25). Based on the ranking by the Collateral Consequence Research Center and my own analysis of state laws on welfare programs, I have categorized both North Dakota's and New Jersey's collateral consequence laws as "not harsh," at least when compared to other states.

The independent variable in this study, the urbanicity of the selected states, is also not as easy to analyze as many of the control variables. Since I am conducting this research at the state level, it was necessary to find one state that is predominantly urban and one that is predominantly rural. To determine which states I would consider rural and urban for this project, I relied on a report by the CDC that categorized each county in the U.S. into one of six classifications: large central metro, large fringe metro, medium metro, small metro, micropolitan, and noncore (Rothwell, Madans, and Arispe 2014). I classified an "urban state" as any state with only large central metro, large fringe metro, and medium metro counties and "rural states" as any state with a majority of counties classified as micropolitan or noncore with only minimal counties classified as small metro. By these definitions, New Jersey is considered urban and North Dakota is considered rural.

My overall dependent variable in this research is what the experiences of women are after they return to their communities from incarceration, but I will be dividing this into multiple variables (recidivism rate for women, employment rates and houselessness rates after incarceration, and personal experiences of women) to make it easier to analyze. The recidivism rate is the percent of female offenders that reoffend within three years of release. This percent is specifically women that were rearrested, so this does not necessarily mean they were reincarcerated. This definition of recidivism is consistent with the Association of State Correctional Administrators' (ASCA) definition of recidivism which is also the definition used by the North Dakota Department of Corrections (Beitsch 2017). Employment rates are based on

the percent of formerly incarcerated women that are able to secure any form of employment within two years of being released. The definitions for housing rates differ slightly between the two states. The definition for North Dakota is any houseless woman that had been incarcerated at any point in 2021; the definition for New Jersey is any houseless woman that listed jail or prison as their prior residence or listed incarceration as their primary cause of houselessness.

For my final dependent variable, the personal experiences of women after incarceration, the definition is more complicated since it is not quantitative. I will be focusing on how women specifically interact with their communities as they are leaving incarceration and if they are able to establish lasting connections in their communities. This variable will measure how easy it is for women to establish a life after incarceration with a specific focus on connecting with their communities as well as how easy it is to find healthcare, housing, and employment.

Methods of Analysis

The independent variable for my study concerns the experiences of women returning to their communities and how successfully they reintegrate. I will be examining this variable using three sets of information: state recidivism data, data on the state of women after incarceration, and the personal experiences of women returning to their communities. Together, all this data will allow me to determine if the experiences of women returning to their communities in North Dakota and New Jersey differ. I will be focusing on data from the last five years to ensure that the laws are still similar to the ones currently in place, but at some points I pull from older data to provide some context for more current data. I am also considering the re entry period for my research the time from first release to three years after release.

I will be able to access state recidivism data through the state governments as well as through some federal sources like the Department of Justice and this will give me a good starting point to determine if the women in these states were ultimately able to establish a place in their community post-release. If a woman returning to her community is unable to find housing, employment, or provide for her family, all things that may be affected by collateral consequence laws, she may have to turn back to crime to survive. So, understanding the recidivism rate among women is important to understanding how collateral consequences impact their post-incarceration experiences.

To complement this recidivism data and to achieve a more detailed understanding of the experiences of women returning to their communities and how they are readjusting to life after incarceration, I will also collect data on housing and employment rates for formerly incarcerated women. This data will help add depth to the recidivism data I find by providing me with a more nuanced understanding of the challenges women face when reentering their communities after incarceration. I will not be able to find this data directly from the state governments since they do not track ex-offenders unless they are participating in probation or parole, so I will have to turn to other sources for this information.

For housing data, I am specifically trying to determine if women were able to secure stable housing after their release or if they are experiencing homelessness. So, while it will be difficult to figure out how many women were able to get housing, it will be easier to determine if they were not able to. Every year the U.S. Department of Housing and Urban Development requires states to complete a Point-in-Time Count of all people experiencing homelessness in the country. This count is conducted by volunteers across the country, usually organized by a non-profit organization within each state. In New Jersey this organization is Monarch Housing Associations

and in North Dakota this organization is the North Dakota Continuum for Care. Volunteers for these Point-in-Time attempt to speak with all persons living in emergency shelters, transitional housing programs, safe havens, and living on the streets or other locations not fit for dwelling. When they speak with these people, they ask a variety of questions about their demographics and situation.

The questions volunteers ask vary between states, but both states collect data on the last place a person lived before the time of the Count, with jail or prison being an option. While the complete datasets from the Point-in-Time Counts are not published, I will reach out to these organizations to collect data on the percent of homeless women that were in prison or jail directly before experiencing homelessness. I will specifically be asking for the number of women that list jail or prison as a prior residence and the total number of women included in the count, this will give me a sense of how many unhoused women in these two states were incarcerated before. Although this data is not perfect, as it will only account for women that were in jail or prison immediately before the Point-in-Time count occurred, it will give me a sense of how being incarcerated can impact a woman's ability to find housing.

Finding data on employment rates for formerly incarcerated women will be more difficult, as this is not as actively tracked by any organizations. Even though this is not specifically tracked by the government or any organizations, there has been some research done on employment for ex-offenders that will be able to help with my research. In "Work and opportunity before and after incarceration" Adam Looney and Nicholas Turner use a combination IRS database of incarcerated individuals and tax returns from those individuals to determine employment rates for ex-offenders (Looney and Turner 2018). They have released the data that they used for this research, which includes data on the employment rate two years post incarceration for men and women divided by state. Unfortunately, Looney and Turner did not calculate the employment rates if the sample size was below 100 people, which was the case for women in some states, including North Dakota. Ultimately, Looney and Turner calculated the male and female employment rates for forty-three states and the federal rate and the male employment rates for all fifty states. So, to get the data necessary for my research, I will create a scatter plot comparing the employment rate for men and the employment rate for women with the forty-four points available and then graph a regression line for this data. I then will calculate the female employment rate in North Dakota and New Jersey using the equation for the regression line and the employment rate for men in North Dakota and New Jersey respectively.

Finally, I will research the specific experiences of women in these communities to complete my understanding of what their life is like after incarceration. For this research I will rely on firsthand accounts from and interviews with women that have been incarcerated and are now returning to their communities in the two states. I will not be conducting my own interviews for this research, but rather relying on past research studies done as well as interviews done by organizations and publications. I will start by identifying organizations that do work researching and combatting mass incarceration and unjust criminal justice policies like the Urban Institute, the Prison Policy Initiative, and the Vera Institute for Justice to see if they have blogs or reports highlighting the stories of women returning to their communities, specifically identifying stories of women in North Dakota and New Jersey.

From there, I will identify organizations and resources specifically serving formerly incarcerated individuals from these states. I specifically identified resources that served the entire state and either focused on women or had services designed for women. I also only selected

organizations that I was able to get in touch with, as many did not have up-to-date phone numbers. For New Jersey I will focus on the Reentry Coalition of New Jersey, the New Jersey Reentry Corporation, and Education & Health Centers of America. For North Dakota I will focus on the Centre Fargo Female Transition Facility, Ministry on the Margins, and F5 Project. By determining what resources are offered to these women and what advice advocacy organizations provide women in these states, I will be able to gain an idea of what barriers women in these states will face. I will also reach out to these organizations and ask the employees that work with these individuals every day about what issues women specifically face when returning to their communities. I will rely on a specific set of questions to ask all the organizations I am able to get in contact with, but I will also ask additional questions based on the answers they provide. The questions I will be asking are:

- How does the work your organization does support ex-offenders?
- What issues do you see women facing as they reenter their communities?
- How do collateral consequence laws impact the ability of women to reintegrate into their communities?
- What resources do women have access to through your organization and other organizations in the state?
- Do you see a difference in the challenges that women in rural and urban environments face as they return to their communities?

To finish this research, I will search through local newspapers, news reports, and other publications from New Jersey and North Dakota for reports and stories about formerly incarcerated women that are reintegrating or have reintegrated into their communities. I will specifically search the websites of local newspapers like NJ Spotlight News, NJ.com, and Tap into for New Jersey and the Bismarck Tribune, the Billings Gazette, and Grand Forks Herald for North Dakota. Based on preliminary research, these seem to be the most common papers for local news in New Jersey and North Dakota respectively. In addition to searching these sites, I will also rely on databases like NexisUni and Factiva to search multiple papers at once for articles concerning women returning to their communities after incarceration in these two states. For this search, I will use keywords like "women," "female," "incarceration," "community reentry," "ex-offenders," "formerly incarcerated," and "reentry." These articles will help supplement the rest of the data that I collect on reentry for formerly incarcerated women and give me a more well-rounded idea of what challenges women face after incarceration and how difficult it is for them to reestablish their lives.

I suspect that the data I find through this last phase of analysis will be more difficult to properly analyze than the quantitative data I collect in the first steps, so I will rely on the quantitative data from recidivism rates and communicating supervision and reintegration data to support the qualitative data I find. I expect that women in both states will face similar challenges, but women in New Jersey will have specific issues reintegrating into their communities. This will look like having more difficulty reaching out to family and friends, having access to fewer resources that focus on community building, and not feeling as accepted in their communities.

While conducting my qualitative research, I will specifically look at how women in these states handle employment, housing, and community building so I can compare it to the quantitative data I collect. Through all these different sources I will be able to able to gain an accurate understanding of the experience that formerly incarcerated women go through in New Jersey and North Dakota. With this data I will be able to compare the experiences of women in

the two states, to determine if I am correct about collateral consequence laws having a more negative impact on women in urban areas than women in rural areas.

Research and Results

I ultimately found that women in New Jersey are more impacted by collateral consequence laws so they had a more difficult time reentering their communities after incarceration, supporting my hypothesis that collateral consequence laws have more of an impact on women in urban areas, hampering their ability to return to and establish a life in their communities post-release. The rest of this section will go into more detail about how I reached these findings and what they mean for my hypothesis but below is a chart summarizing my research findings:

Table 3: Research Findings

Data Collected	New Jersey	North Dakota
Recidivism rate[1]	40.1%	29.9%
Homelessness rate	3.1%	2.9%
Employment rate	37.4%	62.6%
Reentry experiences	Women faced issues finding housing, employment, caring for children, obtaining healthcare, and finding community support from others that had not been incarcerated.	Women faced issues finding housing, employment, caring for children, obtaining transportation to resources, and mending ties with family members, but the role of community was stressed in reentry programs.

Female Recidivism Data

To begin this research, I wanted to develop a basic understanding of how women in New Jersey and North Dakota reintegrate into their communities by collecting data on recidivism among women. This data does not provide a complete picture of what returning to communities is like for women that have been incarcerated, but it helped to provide a base that I will build on with the rest of my research. The data that I will be using for these two states comes from two separate years, so there are potentially some other factors that influenced the difference between recidivism in these two states that I will keep in mind while analyzing my data.

The New Jersey recidivism rate for women in the 2015 cohort was 40.1% (Murphy, Oliver, and Hicks, n.d.). The recidivism rate for female offenders in North Dakota in 2017 was 29.9% (Bohn 2022). It is important to note, that using the ASCA definition, both of these numbers include women that were rearrested but might not have been incarcerated or even convicted; it also includes women who were rearrested for technical violations. So, while these numbers are

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[1] The recidivism rate represents the percent of women in a specific release cohort that were rearrested after three years. The New Jersey data is from the 2015 release cohort and the North Dakota data is from the 2017 release cohort.

broad, it provides an accurate idea of how many women may come into contact with the criminal justice system again after they have been incarcerated.

Women in New Jersey were over 10% more likely to be rearrested three years after release than women in North Dakota. This means that it is more difficult for women in New Jersey to establish a life for themselves after incarceration that does not involve crime, which supports my hypothesis. While collateral consequence laws obviously impact women in both New Jersey and North Dakota, they may have a stronger influence on women in New Jersey, limiting their ability to reintegrate into their communities post-incarceration. The rest of my analysis will attempt to determine what exactly makes it more difficult for women in New Jersey to establish themselves after incarceration.

Female Homelessness Data

Finding housing data for formerly incarcerated women is incredibly difficult, since after release, unless women are participating in a community supervision program, there is no entity that would be tracking their housing situations. So rather than approaching this data through organizations that track data on ex-offenders, I looked for housing data that may include information about incarceration within it. Using data from the yearly Point-in-Time Counts that states are required to perform by the federal government, I was able to find data on the percent of homeless women that were incarcerated before the Count occurred. While this data is limited, as it does not account for women that may have failed to find housing and are now living with family or women that may have found temporary housing immediately after their release, it still helps to determine if it is truly more difficult to find housing in urban areas than rural areas after incarceration.

To collect the data in New Jersey, I spoke with Kasey Vienckowski, an associate at Monarch Housing Associates, who was able to provide me with data on homelessness in New Jersey from the most recent Point-in-Time Count, which took place in 2022. This Count included data from 3,316 women who were experiencing homelessness at the time of the Count and of those 3,316 women, 27 of them listed jail or prison as their residence immediately prior to experiencing homelessness and 78 women listed recent incarceration as their primary cause of homelessness (Vienckowski 2022). This means that 3.1% of women experiencing homelessness on the night the Count was performed had been in jail or prison prior to experiencing homelessness.

The data I was able to access from the North Dakota Continuum of Care was also from the Count that took place in 2022. Kim Seitz provided me with the total number of women from the 2022 count, 1164, and the number of women who had been incarcerated at any point in 2021, 34 (Seitz 2022). This means that 2.9% of women surveyed in the North Dakota Count had been incarcerated in 2021.

Again, it is important to understand that this data only provides a glimpse into the housing conditions of women after incarceration. This data only accounts for women who were recently incarcerated before the Count and does not include women who were not actively homeless at the time of the Count but still did not have access to stable housing. The data from the two states also is not exactly the same data but is similar enough to be compared. These limitations will be discussed more later. But even with these limitations, the data from both New Jersey and North Dakota contains the same limitations, so they can be compared for the sake of this research.

Although the percentage of women who were incarcerated prior to experiencing homelessness is slightly higher in New Jersey (3.1%) than in North Dakota (2.92%), this difference is not large enough to draw any conclusions from. In order to determine if there is a significant difference between the percent of women experiencing homelessness after incarceration in North Dakota and New Jersey, it would be necessary to collect more data. While this data does not support my hypothesis, it is not strong enough data to disprove it, especially when analyzed with the rest of the data I have collected. This data suggests that finding housing is just as difficult for women in North Dakota and New Jersey, implying that at least when it comes to finding housing, collateral consequence laws do not impact women differently in urban and rural areas.

Female Employment Data
Because the data I obtained from Looney and Turner's 2018 research did not include the employment rate two years after incarceration for women in North Dakota, I could not just rely on the exact data, I instead had to run a linear regression analysis using the data I had access to in order to predict a value for female unemployment in ND. Although the employment rate for men and women was different for every state, there was a clear correlation, so by creating a regression line with the forty-four data points I had, I was then able to estimate the employment rate for women in a given state using the employment rate for men in that state (which I had for every state). While this will only result in an estimate, and thus not be as accurate as if I had access to the actual employment rate for women in these two states, it would still provide a sense of how easy it is for women in New Jersey and North Dakota to find jobs.

Figure 1: Regression line comparing employment rate for women with employment rate for men
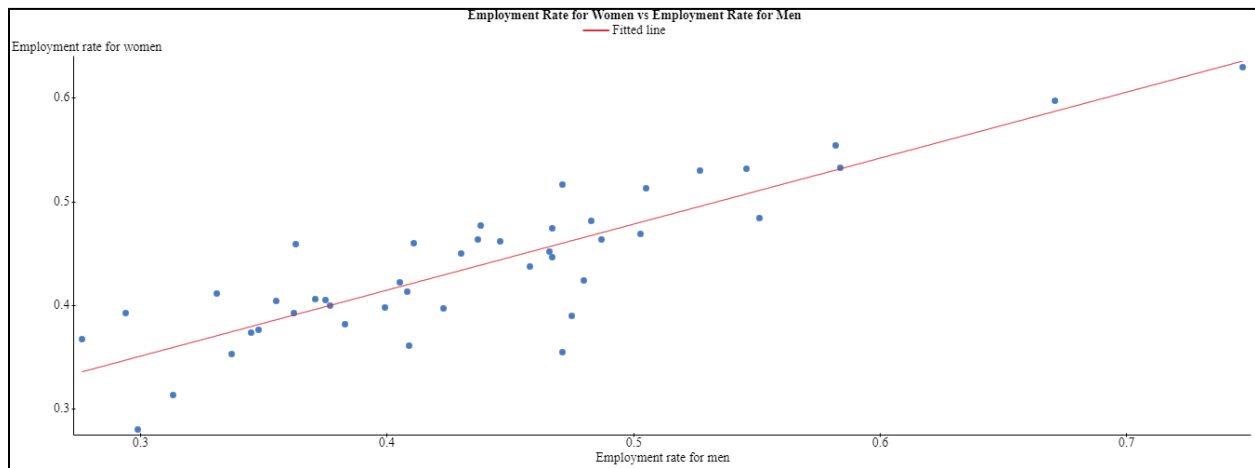
Above is the regression line I graphed using forty-four complete points of data. Each point represents one state or the federal average of all states. For this graph R=0.87 and R^2=0.75, meaning that this regression line is very accurate for predicting the Y value (employment rate for

women) based on a certain X value (employment rate for men). The equation for this line is Y = 0.16 + 0.64x.

Based on the data I obtained from Looney and Turner's research, the employment rate for men in New Jersey is 0.35 and the employment rate for men in North Dakota is 0.732 (Looney and Turner 2018). Using the equation above, I was then able to calculate that the employment rate for women in New Jersey is 0.374 (or 37.4%) and the employment rate for women in North Dakota is 0.626 (or 62.6%).

As I mentioned, since I am using estimates of the female employment rate for these two states, my data is slightly less accurate than if it had been possible to calculate it using the IRS and tax data. But the large difference between these two employment rates, implies that even if this estimate is slightly inaccurate, there would still be a significant difference between female employment rates in North Dakota and New Jersey. The New Jersey employment rate for women is almost 30% lower than the North Dakota employment rate for women. This means that women in New Jersey find it much more difficult to find jobs after incarceration than women in North Dakota do. Finding stable employment is incredibly important for anyone reentering their community after incarceration, but it is even more important for women, who are often responsible for caring for their children as well as themselves (Lipsitz 2011). If a woman cannot find employment soon after being released from incarceration it will be far more difficult for her to be able to establish a life for herself in her community.

The fact that more women in New Jersey struggle more to find employment after release than women in North Dakota supports my hypothesis that collateral consequence laws have a larger impact on women in urban environments. This is most likely because urban areas no longer offer as many opportunities for labor that do not require high levels of education as they once did, and many of the jobs available in urban areas require licenses, something that collateral consequence laws make it difficult for ex-offenders to access (Autor 2019). This means that when women exit incarceration, they are not just competing with each other for these positions, but also men being released as well as individuals that may not have high levels of educational attainment.

Female Reentry Experiences

As the final step of my research, I wanted to get a sense of the actual experiences of women returning to their communities in New Jersey and North Dakota. To accomplish this, I conducted a search of newspapers in the two states to find stories concerning the challenges that women face after incarceration. These stories helped me determine what issues were most discussed by the media which are often prominent issues in the lives of women post-incarceration, but this is also not the most accurate source of data since the news is influenced by a lot of outside factors. To compliment the newspaper analysis, I also researched organizations in New Jersey and North Dakota that assist ex-offenders with their transition back into their communities, I then read any stories these organizations had posted about women that they helped after incarceration and called them to ask directly about the challenges that they saw women facing as they reentered their communities.

New Jersey Analysis

Throughout my research, I analyzed eight articles from women in New Jersey, mostly from NJ.com, NJ Spotlight News, and TAPinto NJ as well as some from national outlets. Women in New Jersey face a wide variety of issues when they are returning to their communities, but one specific challenge that was addressed in almost all the articles I found was access to healthcare.

Part of this focus on healthcare is most likely because New Jersey recently instituted a program to help women find healthcare after incarceration (Nelson 2021; TAPinto Staff n.d.; O'Donnell 2021). Although this program most likely increased the number of articles highlighting the importance of healthcare, this does not mean it is still not incredibly important for women leaving prison to have. Other articles, not written about the new program, stress that women have needed access to reproductive health services and mental health services for a long time, so this issue is still incredibly relevant (Friedman 2009; Steele 2009).

Many articles also highlight how difficult it can be for women to deal with their family and their relationships. Incarcerated women are often recovering from sexual assault and abusive relationships, and it can be easy for them to return to their abusers if they do not have the proper support (Stainton 2019; O'Donnell 2021). This is also an issue that came up in almost every interview I had with representatives from reentry organizations. Women leaving incarceration are dealing with PTSD, anxiety and panic disorders, and sexual abuse without any real support system or healthcare to rely on (Unstence 2022). Women often do not address their trauma or substance abuse issues since they are focused on finding employment and housing, attempting to just push them aside, which of course makes it more difficult for them to readjust to life after incarceration (Adams 2022).

Another issue that was brought up both in the interviews I conducted and the articles I analyzed, was the importance of women having access to a strong support system to help them after incarceration. Although the amount of resources for ex-offenders has increased in recent years, most resources are geared to men and while women are not prevented from accessing these resources, they are often not as effective for women (McHugh 2022). Without resources that are directly aimed at women, women have to find other support systems to help them through their transition back into their communities (Unstence 2022). Often, these additional support systems come from family or friends, but women in urban areas may have less access to friends and family members who are not also readjusting to life after incarceration or involved in criminal behavior, making it more difficult for them to find a stable support system (McHugh 2022). Even if women do have family members that they could potentially turn to for support, they have often hurt their family members in some way, so their family may not be willing to take them in and help them find stability (Adams 2022).

Ultimately, I was able to speak with representatives from three organizations in New Jersey that assist offenders with their transitions: Reentry Coalition of New Jersey, New Jersey Reentry Corporation, and Education & Health Centers of America. When I asked my interviewees about the difference in the challenges that women in urban and rural communities faced, most felt that the challenges were not different, but rather heightened for women in urban areas (McHugh 2022; Unstence 2022; Adams 2022). They did mention that the demographics of women facing incarceration in urban environments is different; more Black and Latina women are incarcerated in urban areas, and their race is going to impact their experiences returning to their communities (McHugh 2022). Interviewees also stressed that the community women are returning to is very different in urban and rural areas. Urban communities are not as close-knit as many rural communities, so women in urban areas can struggle to establish a place in their community again after incarceration (Adams 2022). The organizations that I researched focused on connecting women with services to help them find jobs, healthcare, and housing rather than forming community; although community was still important, it was not the focus so a lot of women in

New Jersey rely more on government services than their communities for support when leaving incarceration (McHugh 2022).

Most of the support systems and programs available in New Jersey center on connecting women to resources that they can use. Kevin McHugh from the NJ Reentry Coalition explained how they identify what resources women need most and help them gain access to these resources. This organization starts by identifying how to help each individual, determining "these are reasons this person ended up here and these are the resources they need," then they start connecting people with resources "they get reintroduced to their family, they get an opportunity to find a job, they get an opportunity to earn some money, we help them with finding housing if they don't have it, all those sorts of things" (McHugh 2022). This quote highlights how methodical the methods in New Jersey are; they identify needs and they find resources to respond to those needs.

North Dakota Analysis

Unsurprisingly, my analysis showed that women in New Jersey and women in North Dakota face similar issues when returning to their communities, although to different extents. I analyzed sixth articles focusing on North Dakota, mostly from the Bismarck Tribune and the Billings Gazette. Some of the primary challenges that women have to face when returning to their communities are finding housing and employment to ensure that they are able to find stability after incarceration (Wernette 2015). Finding a place to stay and a way to make money is often the first priority for women when they exit incarceration (Erickson 2022). Laws impacting ex-offenders make it especially hard to rent, which is often all these women can afford, and employers tend to discriminate against them, making finding employment incredibly difficult (Arthaud 2022).

One of the major reasons that women in North Dakota wanted to find housing and employment is so that they can regain custody of their children and provide for their family (Emerson 2022). A lot of the time women's children are placed into foster care or left with family members while they are incarcerated, so once they are released regaining custody of their children can be a long and tedious process that can be incredibly difficult for women (Emerson 2022). And regaining custody is not the end of the struggle; these women often have not seen their kids for years (families are less likely to visit women in prison than men), so it can be incredibly difficult to rebuild the family dynamic they may have had before incarceration (Atkinson 2022).

For this research, I spoke to employees at four transition services in North Dakota: Centre Fargo Female Transition Facility, Ministry on the Margins, the F5 Project, and Bismarck Transition Center. One of the major challenges they listed for rural women returning to their communities was lack of access to resources; rural areas often lack transportation for these women to access services and offer fewer services to begin with (Arthaud 2022; Atkinson 2022; Erickson 2022). Like women in urban areas, women in rural areas often need support finding housing, employment, healthcare, and mental health services, but their environments may offer fewer of these resources.

Another issue I saw repeatedly mentioned when researching the experiences of women post-incarceration in North Dakota, was how hard it could be to reintegrate into their community, which are often very close-knit. Incarceration changes these women, they do not come back the same as they were before, and that can be hard for both them and their loved-ones to accept

sometimes (Martin 2017). This makes transition facilities and services even more important to these women, who might need some additional guidance as they try to navigate the new community dynamics they are dealing with, and this has been true for years (Michael 2008). It helps for women to be connected with resources directly in their community, as this will not just provide them with resources they need to help them reestablish their life, but will also help them reform connections within their community (Bismarck Tribune 2006; Grueskin 2016; Atkinson 2022). Women are often isolated very far away from their friends and family during incarceration because there are fewer facilities to hold them, which makes readjusting to their communities even more difficult (Salling 2020).

Community is strongly stressed in rural areas and there is often a strong bond holding communities together, which can be a "blessing and a curse" for women as they return from incarceration (Atkinson 2022). While close community ties can make it easier for women to reintegrate into their communities, especially if their family and friends are supportive, it may also make it next to impossible for women to "start fresh" (Atkinson 2022). Often, before women are incarcerated, they damage their relationships with their community, so family and friends may be reluctant to offer support without proof of real change (Arthaud 2022). In rural areas where community is such a large part of most people's lives, this lack of community connections can be incredibly damaging, especially for women that tend to rely on these connections even more than men (Atkinson 2022).

This emphasis on community was very clear in my interview with Sister Kathleen Atkinson of the Ministry on the Margins. She says that establishing a support system is their top priority because it "is primary and is going to make or break whether a woman is able to establish herself" (Atkinson 2022). The Ministry focuses on connecting these women with their families and communities, even organizing a group for families and women to get reintroduced. "We have a group for families both while they are incarcerated and after, to start that relationship early" (Atkinson 2022). This focus on creating relationships within families and communities was prevalent in a lot of my research on North Dakota.

Comparison

There is a lot of overlap between the challenges women in New Jersey and North Dakota face when returning to their communities after incarceration. Challenges finding affordable housing, stable employment, and caring for children were common themes throughout my research and seemed to be the top priorities for most women upon return (Emerson 2022; Adams 2022). Women in both North Dakota and New Jersey relied on transition services a lot to help them reestablish a life post-incarceration, but access to these services differed. While it seems that there were more organizations dedicated to supporting reentry in urban areas than rural areas, these resources were very overburdened and often could not offer the same direct support that rural services could (McHugh 2022); essentially, while services in rural areas can often offer extended one-to-one support for ex-offenders, urban services are dealing with way more cases and cannot commit the same amount of time or really establish a connection with those they help.

The clearest difference between the experiences of women in rural areas and urban areas was how their communities supported them. In urban areas, women often did not have family they could turn to or friends they could turn to who were not dealing with the same issues as themselves. This could make finding stability after incarceration very difficult. While the family

and friends of women in rural areas were returning to might be able to provide more support, they were often reluctant to, having lost their trust in these women (Erickson 2022). Many of the organizations in North Dakota I reached out to work to heal this broken trust, allowing women to reintegrate into their communities more comfortably (Atkinson 2022); the organizations in New Jersey focused more on connecting women with services and resources, and while community was important, it was not stressed in the same way (Unstence 2022). Without access to community support, women have to rely on support from the government, which can often come with a lot of contingencies and is very limited by collateral consequence laws, so quality community support is incredibly important for these women. Based on my research and analysis, the lack of focus on community in urban environments for women leaving incarceration, makes these women more reliant on government services, and therefore more impacted by collateral consequence laws.

Limitations and Opportunities for Further Research
        My research is intended to start the conversation on how collateral consequence laws may impact women differently in rural and urban environments. As such, I did not have a lot of previous research on this subject to guide my research, so there are many limitations to my research and many places that others can build on in the future. This research is a starting point and while my findings support that collateral consequence laws impact women in urban environments more than women in rural environments, there is still a lot of research that should be done to confirm my findings.
        While I was careful to ensure that the states I chose for this research were as similar as possible to avoid the influence of confounding variables, there are still some differences between New Jersey and North Dakota that could be responsible for the differences in the experiences of female ex-offenders I observed in this research. Primarily, the collateral consequence laws in these states are not exactly the same. I did choose these two states specifically because they had such similar collateral consequence laws and not only did my research find the state laws similar, but other research supported these findings (Love and Schlussel 2020). Despite this, I was not able to read and analyze every single law on the books in these two states concerning ex-offenders. It is possible that although the slight differences between the laws in North Dakota and New Jersey may not seem impactful, they do actually influence the experiences of women returning to their communities after incarceration.
        Any research done comparing different states will encounter this problem, since finding two states with exactly identical collateral consequence laws is nigh impossible. One way to minimize this impact while examining states would be to limit the scope, focusing on one aspect of collateral consequence laws (voting, employment, housing, welfare, etc.). This would mean researchers would be comparing fewer laws, so it would be easier to find states with laws that do not differ as much. Although, even getting more specific, researchers would struggle to find the exact same laws in two states, so researchers may want to instead compare areas within the same state. This would ensure the laws governing the women in the areas of interest would be exactly the same, since the laws are set at the state level.
        In addition to different collateral consequence laws, there are other demographic differences in the states that could have impacted this research. For example, New Jersey's prison population is predominantly Black and remains one of the states with the worst racial discrepancies in incarceration (Nellis 2021). The experiences of Black people and white people both during and

after incarceration differ greatly, and this could account for the variation I saw between the two states. North Dakota also has one of the highest employment rates in the country, which could explain why the employment rate for women after incarceration was so much higher in North Dakota than New Jersey ("State Jobs and Unemployment" 2022).

In order to address this issue, future research should expand beyond New Jersey and North Dakota. If this phenomenon exists when comparing other states, that would suggest it is in fact a pattern that exists across urban and rural areas. Researchers should compare other states with similar characteristics to see if it is possible for them to replicate this research. It is also important to replicate this research using units of analysis other than states, as this will allow for more specific and accurate research. Although New Jersey has very few rural areas and North Dakota very few urban areas, there are still a few (small) areas in each state that may not fit within the classification I assigned, and it is possible this influenced my results. Further research could compare the experiences of formerly incarcerated women in rural and urban areas within one state. This smaller scale research would ensure the laws remain perfectly constant between the units of analysis and would allow researchers to ensure that each area being examined is clearly fully urban or rural.

I was also limited by the data that I had access to which limited my ability to compare the experiences of women leaving incarceration in these two states. To begin with, I only examined a few aspects of women's lives after incarceration, specifically housing and employment, and community building; while these are certainly important challenges women face on return, there are a lot of other aspects of their lives impacted by collateral consequence laws, such as voting and access to welfare. I was not able to access any specific data concerning these issues, so I was not able to discuss it extensively in my research. Future research should expand on these issues. Additionally, the data I was able to collect is limited and cannot be used to make any strong conclusions. I was forced to estimate the employment rate for formerly incarcerated women, and while likely accurate, it would have been more convincing if I could calculate the actual employment rate. The housing data I was ultimately able to access also excludes a lot of female ex-offenders, only providing data on those who listed prison or jail as their prior residence. More detailed information on women that considers incarceration the primary cause of their homelessness and on women who were actually able to rent or buy a place to live without assistance would help make any conclusions sound.

Finally, because in my research I was looking at collateral consequence laws and their impacts generally, I was not able to go into immense detail concerning any of the areas I was researching. I was attempting to get a very general sense of how all collateral consequence laws impact women returning to their communities, so I had to select variables that I thought would best help me accomplish this. The dependent variables I chose to look at and the collateral consequence laws I focused on when comparing the states, concerned the issues that most impact women as they exit incarceration, but there are of course other variables. Looking into other variables will help to build on my research and make it more well-rounded. It will also help to conduct more narrow versions of my research focusing on just one aspect of collateral consequences laws (housing, employment, health care, etc.). More specific research will help to build on the research presented in this paper and determine if my conclusion can be applied in other scenarios.

Conclusion

Understanding how collateral consequence laws impact women differently in urban and rural environments is incredibly important as many states begin to repeal or change these laws. If legislators want to change these laws to limit the impact they have on ex-offenders while still protecting the public, they need to understand what aspects of these laws hurt ex-offenders the most so they can change them. Criminal justice reforms often assume gender-neutrality, operating on the assumption that reforms that benefit men will also benefit women, but this is not always true, women are often dealing with additional trauma and face gender discrimination before, after, and during incarceration (Berman 2005). In order to ensure that reforms to collateral consequence laws impact women equally, it is necessary for legislators to consult research analyzing how women are impacted by collateral consequence laws. Furthermore, these changes may not impact women in urban and rural areas equally, so local reentry organizations and activists should be aware of what additional support women in their areas may need.

The research presented here suggests that women living in urban areas may be more negatively impacted by collateral consequence laws than women in rural areas are. While more research is needed to confirm if this is a pattern that can be applied to all rural and urban areas, not just New Jersey and North Dakota, this research provides a starting point. I examined a few different variables to get a sense of how collateral consequence laws impact women, most of which imply that these laws are more impactful on women in urban environments. Women in New Jersey had a higher recidivism rate than women in North Dakota, highlighting that they struggle to build a life for themselves without turning to crime. Additionally, women in New Jersey had lower rates of employment, showing that collateral consequence laws make finding stability after incarceration more difficult for women in urban areas. Although the data on housing I collected did not suggest that there is a difference in the number of homeless women that were formerly incarcerated in North Dakota and New Jersey, the rest of my data suggests that the experiences of these women do differ. Finally, the research I conducted on the personal experiences for incarcerated women revealed that community building is a focus in a lot of North Dakota reentry services, while women in New Jersey are connected to services that will make them more reliant on government assistance. My findings suggest that women in urban areas will feel the impacts of collateral consequence laws more than women in rural areas, opening this topic up for further research and development.

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MEDICAID EXPANSION AND PREVENTIVE CARE UTILIZATION: A COMPARISON OF PREVENTIVE CARE UTILIZATION AMONG HABITANTS OF MEDICAID EXPANSION AND MEDICAID NON-EXPANSION STATES

Alice Kahkajian

Abstract

On March 11, 2020, the World Health Organization formally declared that the novel coronavirus outbreak (COVID-19) has become a global pandemic. During the first year of the pandemic (2020), United States total civilian employment decreased by 8.8 million workers as businesses suspended or terminated their operations in response to assembly restrictions. These high levels of unemployment were accompanied by losses in employer-sponsored health insurance, beguiling Americans to apply for affordable health insurance through Medicaid. This quantitative study aggregates nationally representative health behavior data from the 2020 Behavioral Risk Factor Surveillance System to investigate the differences in low-income, non-elderly adults' utilization of preventive health care services in states that expanded Medicaid through the Affordable Care Act and those that have not, while controlling for various sociodemographic variables. The results of this study suggest that residing in a Medicaid expansion state does significantly increase a patient's propensity to pursue four of the examined preventive care outcomes. This study provides insight into the role that Medicaid expansion has on increasing low-income adults' ability to access preventive care services, which is information that policymakers can employ to encourage the remaining 12 Medicaid non-expansion states to adopt Medicaid expansion.

Keywords: Medicaid; Health Insurance; Health Behavior; Patient Protection and Affordable Care Act; Preventative Care.

Introduction

On March 23, 2010, the Affordable Care Act (ACA), formally known as the Patient Protection and Affordable Care Act, was signed into law by former President Barack Obama (Obama 2016). The ACA is regarded as being one of the most transformative pieces of health care legislation enacted in the United States since the creation of Medicare and Medicaid in 1965 (Obama 2016). The 2010 version of the ACA was expressly constructed to alleviate the existence of three primary problems that were plaguing the United States healthcare system: high costs of healthcare coverage, inadequate risk protection that health insurance was providing, especially to those with pre-existing conditions who are susceptible to accumulating high costs, and increasing nationwide insurance coverage through offering states the option to adopt Medicaid expansion (Giled, Collins, and Lin 2020; U.S. Centers for Medicare & Medicaid Services 2022b). As a result of these challenges, more than 1 in 7 Americans were uninsured in 2008 (Obama 2016).

When the ACA became a law, its preeminent provisions included enhanced consumer insurance protections to prohibit lifetime monetary maximums on coverage, increased access to insurance coverage by expanding Medicaid eligibility to insure individuals who earn incomes below 133 percent of the federal poverty level (FPL), and system performance improvements to improve the quality of United States healthcare (National Conference of State Legislatures 2011). The adoption of these market reforms lowered the number of uninsured Americans from 48.2 million in 2010 to 28.2 million in 2016: a marked 41 percent decrease (U.S. Department of Health and Human Services 2021). This reduction in healthcare uninsurance has also been documented to be accompanied by greater financial security due to reductions in medical debt collection, an improved ability for Americans to access healthcare, and an overall improvement in health status (Obama 2016).

Among all health care services offered by medical personnel, evidence-formed preventive care is at the forefront of health management. Preventive care services include routine checkups, flu shot receipt, cholesterol screenings, dental visitations, and HIV/STD testing. By providing Americans with access to these recommended preventive health care services, their risk for disease, disabilities, and death is reduced through early screenings that aid in the early detection and management of disease, which consequently increases the patient's ability to be properly treated (Yue et al. 2019, 1469). Among the benefits conferred by the ACA, the most salient is that the ACA increased access to these preventive care services. This is evidenced by the statistic that approximately 76 million Americans received no-cost preventive health care services since the ACA's preventive services coverage rule became effective (Burke and Simmons 2014, 2). The preventive services coverage rule stipulated that beginning on September 23, 2010, most insurance plans are required to provide preventive health services without cost-sharing (Burke and Simmons 2014, 1).

Unfortunately, even though this policy was intended to support the American people, there were considerable political and legislative efforts made to invalidate the legislation. Most eminently, the United States Supreme Court's 2012 decision in *National Federation of Independent Business v. Sebelius* upheld the constitutionality of the ACA's individual mandate, but seven justices, led by Chief Justice John Roberts, declared that the mandatory expansion of Medicaid eligibility to all adults below the age of 65 who earn an income below 133 percent of the FPL is unconstitutional (Rosenbaum and Westmoreland 2012, 1655). The court's decision

effectively permitted each state to determine whether they would adopt the Medicaid expansion provision of the ACA (Soni 2020, 1594).

The discrepancies created by the differing Medicaid eligibility guidelines in Medicaid expansion and non-expansion states, in addition to longstanding systemic and structural inequities in health care, affect the utilization of preventive health care services. The importance of my research arises from the significance of examining how these institutional frameworks, exacerbated by the COVID-19 pandemic, affected preventive care utilization. During the first year of the COVID-19 pandemic, 2020, the Supreme Court decision was responsible for there being 38 Medicaid expansion states and Washington, DC, and 12 non-expansion states (The Henry J. Kaiser Family Foundation 2022). The effects of the COVID-19 pandemic reverberated throughout various aspects of the United States as 11.1 million Americans became officially unemployed, 7.0 million were employed but reported suffering a reduction in pay and/or hours, and 4.5 million exited the workforce (Shierholz 2020). Existing academic literature about this topic maintains that these instances of job loss are not only accompanied by loss of income, but also the risk of losing employer-sponsored health insurance coverage (Garfield et al. 2020). As these individuals lose their employer-sponsored health coverage benefits, they either continue paying their full premium for a period of time—known as COBRA continuation—or they become eligible for ACA-facilitated Medicaid coverage (Garfield et al. 2020).

However, since not all states have expanded Medicaid coverage through the ACA, these newly qualifying individuals receive different protections and incur varying costs depending on whether they reside in a Medicaid expansion or a non-expansion state. There is a dearth of literature that investigates how the utilization of preventive care services during the first year of the COVID-19 pandemic differed among Medicaid expansion states and non-expansion states. I address this shortcoming by asking the following research question: Are low-income individuals residing in Medicaid expansion states more likely to utilize routine preventive care services than low-income persons residing in Medicaid non-expansion states in the year 2020? To investigate this research question, I begin by reviewing previous literature about the social determinants of health and the Affordable Care Act, then delineate my research methodology, and conclude by sharing the results of my research and its analysis.

Literature Review
The Social Determinants of Health in the United States
The foundational concept of "social determinants of health" presents a multifaceted perspective of the various circumstances and conditions that influence individual health outcomes. The Centers for Disease Control and Prevention (CDC) identifies five social determinants of health that have a formative role in influencing the downstream health behaviors that an individual performs (World Health Organization n.d.). The CDC's five social determinants of health are education access and quality, community context, neighborhood and built environment, economic stability, and healthcare access (World Health Organization n.d.).

Social Determinant 1: Education Access and Quality
Decades of research have ascertained that there are stark health disparities across educational groups within the United States (Goldman and Smith 2011, 1733). Since the 1990s, there has been a startling decline in the longevity of American adults without a high school diploma while

those who have earned a high school diploma have experienced an incremental increase in life expectancy (Olshansky et al. 2012, 1806). The cross-sectional association between formal schooling and health is established by education's capability to impart non-cognitive and cognitive skills that are practically relevant to improving adult outcomes, such as economic stability (Steptoe and Jackson 2020, 7).

Non-cognitive skills include work ethic, problem-solving skills, critical thinking, and self-discipline, all of which are nurtured and reinforced in academic settings (Borghans et al. 2008, 973). Mastery in these areas enhances personal autonomy, which facilitates the utilization of positive coping mechanisms void of engagement in risky behaviors that promote health and longevity (Ross and Wu 1995, 722). In addition to promoting non-cognitive skills, Lövdén et al. (2020) identify that education advances cognitive abilities that are predictors of overall health behaviors. Baum, Ma, and Payea (2013) expound upon this postulation by establishing that these enhanced cognitive abilities provide opportunities for improved health because they increase an individual's ability to obtain a job that provides health-promoting benefits, particularly health insurance, paid leave, and retiree health benefits.

Social Determinant 2: Social and Community Context

Since the late nineteenth century, medical researchers have begun constructing empirical studies to examine how everyday living conditions and practices influence individual health outcomes (Carey and Crammond 2015, 134). Termed "social and community context," this social determinant of health encompasses key tenets of civic participation, discrimination, incarceration, and social cohesion (Office of Disease Prevention and Health Promotion 2021). For instance, engaging in civic activities involving voting, volunteering, and community groups augments a person's ability to develop meaningful social connections and partake in physical activity (Fenn et al. 2021, 926). By engaging in community activities that promote a sense of purpose, holistic well-being, and mental health are improved (Fenn et al. 2021).

Social Determinant 3: Neighborhood and Built Environment

Similar to how the social settings that Americans reside and work within have a substantial effect on health behaviors and outcomes, there has been an exponential growth in studies over the past 15 years that evaluate how neighborhood conditions also affect these items (Roux and Mair 2010, 125). These risk factors include environmental pollution, under-resourced schools, and high unemployment rates (Robinette et al. 2016). Mariotti (2015) provides a scientific explanation for this phenomenon, citing that the stress created by these hardships impairs DNA repair mechanisms and burdens the regulatory systems of the brain and body by elevating cortisol and adrenaline levels—both processes that increase the risk of chronic disease development.

Social Determinant 4: Economic Stability

Education, community context, and neighborhood environments are each able to advance or impede an individual's ability to pursue health-promoting activities. However, it is important to acknowledge that economic stability is an underlying theme that affects each of these social determinants. A large body of research demonstrates that financial hardship negatively affects the health of individuals and their families since it is a negative stressor that adversely affects psychological and physiological functioning (Tsuchiya et al. 2020). Castro, Gee, and Takeuchi

(2010) argue that this occurs because financial hardship creates material deprivation that threatens households' ability to purchase basic necessities and access health-promoting resources such as medication and health services. Lynch, Kaplan, and Shema (1997) concur by adding that this reality is exacerbated in low-income households where members have scarce resources to buffer the effects of their financial insecurity. As they struggle to manage the cumulative impact of their economic adversity, they begin to develop psychological distress that engenders other poor health outcomes late in life (Kahn and Pearlin 2006, 18).

Social Determinant 5: Health Care and Access

Lastly, access to health care and the services that it offers is recognized as being one of the most important determinants of individual health and well-being. Limited access to affordable and high-quality healthcare undermines an individual's ability to receive preventive care, health screenings, and routine checkups that are needed to maintain overall wellness (Agarwal, Mazurenko, and Menachemi 2017). Unfortunately, healthcare access can be limited for certain population groups due to nonfinancial barriers and financial constraints (Kulgren et al. 2011). Common nonfinancial barriers that hamper healthcare access are geographic barriers, a lack of culturally competent healthcare providers, and linguistic differences (ibid). These nonfinancial hardships often coexist with numerous financial barriers including an absence of cost transparency, high deductibles, and expensive copay charges (ibid). Klerman (1992) emphasizes that the combination of financial and nonfinancial barriers leads individuals to delay their receipt of care or completely distracts them from promptly seeking the services that they need.

The Affordable Care Act

Even before the COVID-19 pandemic, policymakers, elected officials, and health researchers were cognizant of how health care availability impacts human health. These stakeholders collaborated with former President Barack Obama to ensure that all low-income American adults can access high-quality health insurance through the Medicaid program (Silvers 2013, 402). When the ACA was first signed into law on March 23, 2010, all American adults who earned an income at or below 138 percent of the FPL were eligible to apply to receive Medicaid coverage, regardless of their age, family arrangement, or health status (Silvers 2013, 403).

However, two years after the law was enacted, the Supreme Court of the United States heard a lawsuit that sought to overturn the ACA. Upon hearing this case and reevaluating the conditions of the ACA, the majority of the Court decided that it is unconstitutionally coercive for all states to be required to expand Medicaid coverage to all American adults earning an income at or below 138 percent of the FPL (The Henry J. Kaiser Family Foundation 2012). The outcome of the 2012 landmark Supreme Court decision *National Federation of Independent Business (NFIB) v. Sebelius* was that individual states are permitted to withdraw from enforcing this eligibility requirement (ibid). By the end of 2012, only four states had voted to expand Medicaid coverage to the ACA's pre-reform population (Simon, Soni, and Cawley 2017, 391). By the beginning of the COVID-19 pandemic in 2020, this number had increased to 38 Medicaid expansion states and Washington, DC, while 12 states had still not yet expanded their Medicaid program through the ACA (The Henry J. Kaiser Family Foundation 2022).

The Effects of the Affordable Care Act on Healthcare Access

The reforms that the ACA instituted in the United States healthcare system are revered for decreasing the number of uninsured Americans to historically low levels and for reducing healthcare costs (Blumenthal, Collins, and Fowler 2020, 963). Data released by the U.S. Department of Health and Human Services (HHS) in 2021 for the 2020 year stated that a record high of 31 million Americans were reported to be receiving their health coverage through the ACA (U.S. Department of Health and Human Services 2021). HHS's data also revealed that uninsurance rates have declined in each state that had adopted the ACA's Medicaid expansion provision (ibid).

In addition to this aggregate data, there has been research published demonstrating that the benefits of Medicaid expansion have been particularly valuable to low-income populations who have historically lacked health insurance coverage (Kominski, Nonzee, and Sorensen 2017, 492). These studies ascertain that low-income persons residing in states that have adopted the Medicaid expansion provision have experienced improved access to healthcare and reduced financial hardship in paying for those services (ibid). Since it is challenging to determine the health insurance status of every low-income person in the United States, this relationship is extrapolated by the rationalization that low-income persons in Medicaid expansion states have a higher probability of being publicly insured than those in non-expansion states (Choi, Lee, and Matejkowski 2018; Kominski, Nonzee, and Sorensen 2017). Medicaid expansion is a powerful mechanism that contributes to this outcome as its adoption substantially expands Medicaid access to nearly all adults who earn an income at or below 138 percent of the FPL (Silvers 2013, 402). This knowledge has formed the basis of my hypothesis that low-income individuals in Medicaid expansion states will be more likely to receive routine preventive care than those in non-expansion states.

Affordable Care Act's Medicaid Expansion and Preventive Medical Care Use
There is an abundance of literature that contends that the increased health insurance coverage rendered by the ACA's Medicaid expansion provision increases preventive medical care service utilization (Tummalapalli and Keyhani 2020). The U.S. Centers for Medicare and Medicaid Services defines preventive services as "routine health care that includes screenings, check-ups, and patient counseling to prevent illnesses, disease, or other health problems" (U.S. Centers for Medicare & Medicaid Services 2022). These preventive care services dramatically reduce the risk of disease development, disability, and death, yet millions of Americans neglect to receive these recommended services due to system-level barriers such as inadequate referral systems, a deficit of medical care providers, and gaps in insurance coverage (Borksy et al. 2018; McEntee, Cuomo, and Dennison 2009).

One of the primary objectives of the ACA was to mitigate these problems by providing comprehensive Medicaid coverage to more than 17 million Americans (Allen et al. 2017, 2). There is an absence of consensus within current literature about the behavioral impacts that this expanded health insurance coverage had, specifically regarding preventive care utilization. Healthcare researchers at the University of Minnesota Medical School's Department of Family Medicine and Community Health concluded that system-level barriers to healthcare continued to pose an immense obstacle to healthcare utilization and accessibility, even among those who are receiving insurance coverage through the ACA's Medicaid expansion provision (Allen et al. 2017, 5). Researchers at the Kaiser Family Foundation bolstered this assertion by noting that

there has not been consistent evidence that preventive care service delivery increased after the implementation of ACA-facilitated Medicaid expansion (Tummalapalli and Keyhani 2020).

Contrastingly, Wherry and Miller (2016) disagree with this proposition as they believe that the opposite effect exists, meaning that residents receiving ACA-facilitated Medicaid in Medicaid expansion states engaged in increased preventive care practices than their non-expansion state counterparts. As health economists assessed the effect that Medicaid expansion had on health behaviors each year after its implementation, it was found that they were not immediate and that the effects of Medicaid expansion increased over time (Soni 2019, 1602).

Access to Affordable Care and Preventive Care Utilization
During the beginning of the COVID-19 pandemic in 2020, the ACA's target population of economically disadvantaged, nonelderly, childless adults primarily relied on Medicaid for their health insurance to pay for health treatment, procedures, and related services (Corallo 2022). Between February 2020, the month before the COVID-19 pandemic was declared a public health emergency, and January 2021, Medicaid enrollment had increased by 13.9%, reflecting the impact of the economic downturn generated by the COVID-19 pandemic (U.S. Centers for Medicare & Medicaid Services 2021).

As an increasing number of adults began to rely on Medicaid during the COVID-19 pandemic, it is important to determine the extent to which their health outcomes, specifically preventive care utilization, differed in expansion and non-expansion states. While there are many types of health care, I decided to concentrate on preventive care utilization since preventive care is a valuable type of care that reduces the development of future health risks, medical conditions, and diseases. Specifically, preventive care is defined as "routine health care that includes screenings, check-ups, and patient counseling to prevent illnesses, disease, or other health problems" (U.S. Centers for Medicare & Medicaid Services). Historically, there has been a strong interrelation between individual health insurance status and preventive care access. A 2014 study published by the Research Triangle Institute provided evidence for this claim by sharing that uninsurance increases an individual's probability of forgoing preventive care by 4.41 percentage points compared to individuals who have continuous private health insurance coverage (Lines et al. 2014, 12). The absence of continuous health insurance coverage services is therefore a barrier to the attainment of critical preventive health care services (ibid).

Although ACA-facilitated Medicaid expansion will not resolve all healthcare accessibility issues nor will it provide insurance to every low-income adult, it is still a product that has the potential to resolve some of the problems that low-income Americans experience as they solicit health care services. Two principles permit health insurance to have this effect on preventive care service receipt: the law of demand and moral hazard. According to the fundamental economic principle of the law of demand, the demand for a quantity of an item varies inversely with its price (Cooper and John 2011). The predicted implication of this causal mechanism in the healthcare market is that when the price of health care is high, patients will demand less of it (ibid). Regarding preventive care, when the out-of-pocket cost of preventive care is reduced, through health insurance programs such as Medicaid, then it will become more utilized (Simon, Soni, and Cawley 2017, 392).

In addition to the law of demand, there is a moral hazard in the health insurance system. Moral hazard is an economic term used to describe how an individual has a decreased propensity

to act in good faith and honest intent when they are aware that an external party will bear the economic consequences of their choices (Rowell and Connelly 2012, 1068). Moral hazard manifests itself in the healthcare system as insured persons purchase additional healthcare services that they otherwise would not have pursued had they been uninsured (Nyman 2004, 194). Economist Mark V. Pauly (1968) perceives moral hazard in the health insurance industry as a welfare loss to society. This loss occurs because insured consumers perceive the highly subsidized services that they use as having no cost (ibid, 535). Therefore, the insured consumer is prone to solicit an excess amount of healthcare services whereas an uninsured patient would be required to pay market price for the service, deterring them from accessing healthcare (ibid). However, the healthcare services that are rendered to insured patients are still expensive to produce. This discrepancy between the high cost of the resources utilized to provide the health service and the low value that it holds to consumers due to health insurance's cost-reducing effect creates an inefficiency in the healthcare system (ibid). Nevertheless, it does explain why insured patients are more likely to access preventive care than their uninsured counterparts.

Study Design

This research will compare low-income individuals to determine whether low-income persons residing in Medicaid expansion states are more likely to receive routine preventive care services than their counterparts residing in Medicaid non-expansion states in the year 2020. The ACA defines an individual as being low-income if their household income is at or below 138 percent of the FPL. This percentage is calculated using the household size and income data that the individual reported to the 2020 Behavioral Risk Factor Surveillance System (BRFSS). Using these two pieces of information, I calculated each respondent's income as a percentage of the federal poverty level. To do so, I first determined the respondent's reported family size. Then, I used that information to divide their reported income amount by the poverty guideline that the U.S. Department of Health and Human Services established for that household size in 2020. The dependent variable of preventive care utilization is operationalized through four specific outcomes of flu shot receipt, routine checkup receipt, HIV/sexually transmitted disease (STD) testing, and dental visits. Therefore, the null hypothesis of this study is in a comparison of individuals, low-income persons residing in Medicaid expansion states will be no more likely to receive routine preventive care services than low-income persons residing in Medicaid non-expansion states in the year 2020. I propose that low-income persons residing in Medicaid expansion states will be more likely to receive preventive care services than their counterparts in non-expansion states in 2020. The foundation of my proposition is based on the proposition that low-income individuals who live in an expansion state have a greater likelihood of receiving health insurance through Medicaid than low-income persons residing in a state that has not adopted the ACA's Medicaid expansion (Choi, Lee, and Matejkowski 2018; Kominski, Nonzee, and Sorensen 2017).

Research Design

The objective of this research is to evaluate the effects that Medicaid expansion had on preventive healthcare utilization in the year 2020 among low-income populations. There will be 27,719 cases in my study. These cases represent all low-income individuals from all 50 states and the District of Columbia who responded to the BRFSS survey in 2020. The data for these cases will be acquired from the 2020 BRFSS. The BRFSS is a nationally representative survey of

health behaviors and yields a relatively high response rate. The data aggregated by this survey is publicly accessible on the CDC's website. In regard to the independent variable, the BRFSS does not specify whether respondents reside within a Medicaid expansion or non-expansion state. Instead, the BRFSS designates the name of the state that the respondent lives in. In order to classify each state as having been an expansion or non-expansion state in the year 2020, I will reference the Kaiser Family Foundation's online resource about Medicaid state expansion status and code each respondent as living in an expansion or non-expansion state as of December 31, 2019.

Furthermore, the ACA of 2010 established a set of eligibility criteria for low-income individuals to qualify for health insurance coverage. A critical feature of Medicaid expansion is that it broadened these requirements to ensure that all individuals who earn an income at or below 138% of the FPL, in addition to being under the age of 65, are eligible to enroll in Medicaid. Medicaid non-expansion states have more stringent eligibility guidelines that vary depending on each state's program (Centers for Medicare & Medicaid Services 2021). I designed my study under the assumption that both Medicaid expansion and non-expansion states share the same basic set of eligibility requirements: that recipient income must be at or below 138% of the FPL and that the recipient must be below the age of 65. I restricted my analytical sample to include only those BRFSS respondents who possess these characteristics.

To verify the relationships proposed by my hypothesis, I utilize SPSS to conduct a chi-squared test of significance to analyze the relationship between the nominal-level independent and dependent variables with control variables. In my research, the dependent variable, measured in four different ways, is a dichotomous variable as it will assume two categories—respondents either utilized the specified preventive care service or they did not. The independent variable is also measured at the nominal level because Medicaid expansion status is compartmentalized into two discrete categories: either the state is a Medicaid expansion state or a non-expansion state. Furthermore, since there are various control variables in my study, I use chi-square to test the independent variable of Medicaid expansion status on the dependent variable of the specific preventive care outcome. Then, I test each control variable on each specified dependent variable. The control variables in my study are sex, educational attainment, marital status, race/ethnicity, and whether or not the respondent has children. For each analysis which reveals that the control variable is related to the dependent variable, I continue to use the control variable in the model of that specific dependent variable outcome. However, if it is determined that the control variable is not related to the dependent variable, then I refrain from using the control variable in the statistical model of the specified dependent variable.

As I test my hypothesis using chi-square, my significance level is defined as $p \leq 0.05$. After defining the significance level, I compute the test statistic to obtain a chi-squared value and a *P-value*. By referring to the chi-square distribution table, I determine whether the relationship between the independent variable and the specified dependent variable was produced by random sampling error. If the chi-squared value is greater than or equal to the critical value ($\chi2 \geq$ critical value), then I can reject the null hypothesis of no relationship between the independent, dependent, and control variables. In the context of my research, this would signify that Medicaid expansion status does have a role in determining whether respondents utilize the specified preventive care outcome when controlling for a specific demographic variable.

Operationalization and Measurement of Concepts

The unit of analysis that frames my hypothesis is "individuals." The independent variable of the hypothesis is the binary classification of whether the individual resided within an expansion or non-expansion state in the year 2020. An expansion state is defined as one that had implemented Medicaid expansion provisions by December 31, 2019, through the ACA to provide Medicaid eligibility to all individuals who earn an income below 138 percent of the FPL (Kominski, Nonzee, and Sorensen 2017). Contrastingly, a Medicaid non-expansion state has not expanded its Medicaid eligibility to this low-income residential population by July 2, 2020. Expansion and non-expansion states were restricted to the status that they had adopted by July 2, 2020 (Nasseh and Vujicic 2016).

In accordance with the aforementioned definition, Medicaid expansion states in 2020 included Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, Virginia, Washington, and West Virginia. Contrarily, Medicaid non-expansion states comprised Alabama, Florida, Georgia, Kansas, Mississippi, Missouri, North Carolina, South Carolina, South Dakota, Tennessee, Texas, Wisconsin, and Wyoming (see Image 1).

The dependent variable of preventive healthcare services is defined by Section 2713 of the ACA as services that improve patient well-being by preventing the development of disease, disability, and death (The Henry J. Kaiser Family Foundation 2015; U.S. Department of Health and Human Services n.d.). Within my research, there are different indicators of preventive care including flu shot receipt, routine check-ups, HIV/sexually transmitted disease testing, and dental visits. The definitions for each of these indicators are derived from the BRFSS 2020 Codebook.

- ***Flu shot receipt*** is defined as an individual being inoculated against the flu by receiving either a nasal spray flu vaccine or an injection in the arm within the past 12 months.
- ***Routine check-ups*** are defined as general physical examinations that a primary care provider conducts to prevent the onset of illness or disease, rather than treat an existing injury or condition. Based on CDC guidelines, a routine checkup is considered to have been had if the individual has received one once within the past 12 months.
- ***Human Immunodeficiency Virus (HIV)/Sexually Transmitted Disease testing*** is defined by the CDC's recommendation that individuals receive at least one HIV test between ages 13 and 64 and yearly testing for persons who have a greater risk of infection due to engaging in risky sexual behaviors, having been diagnosed with tuberculosis, and intravenous drug utilization (National Institute of Child Health and Human Development 2021). The definition of HIV testing is inclusive of oral fluid tests that detect the presence of HIV Type 1 and HIV Type 2 antibodies but excludes tests that are used to screen blood donor samples (Behavioral Risk Factor Surveillance System 2021).
- ***Dental visits*** include all types of healthcare professionals who specialize in dentistry including orthodontists, oral surgeons, dental hygienists, and other dental specialists. A respondent is considered as having a dental visit if they have visited any of these practitioners at least once within the past 12 months.

In addition to the data that I will acquire for the independent and dependent variables from the CDC's nationally representative 2020 BRFSS survey, I will also incorporate

demographic control variables in order to adjust my results for the effect that these variables may have. The 2020 BRFSS survey provides data for the control variables of respondents' sex, educational attainment, marital status, race/ethnicity, and whether the household has children. The BRFFS defines each of these demographic pieces of information as the following:

- ***Sex*** is a binary variable that respondents provide by identifying as male or female.
- ***Educational attainment*** is categorized using various levels including never attended school or only kindergarten, grades 1 to 8 (elementary), grades 9 through 11 (some high school), grade 12 or GED (high school graduate), college 1 year to 3 years (some college or technical school), and college 4 years or more (college graduate).
- ***Marital status*** is categorized by whether the respondent reports that they are married, divorced, widowed, separated, never married, or a member of an unmarried couple.
- The categories for ***race/ethnicity*** are white only (non-Hispanic), Black only (non-Hispanic), other race only (non-Hispanic), and Hispanic.
- A respondent is classified as having ***children*** in their household if they report having one or more persons under the age of 18 living in the same house as them.

Image 1: Map of the United States of America displaying state status of State Medicaid Expansion.
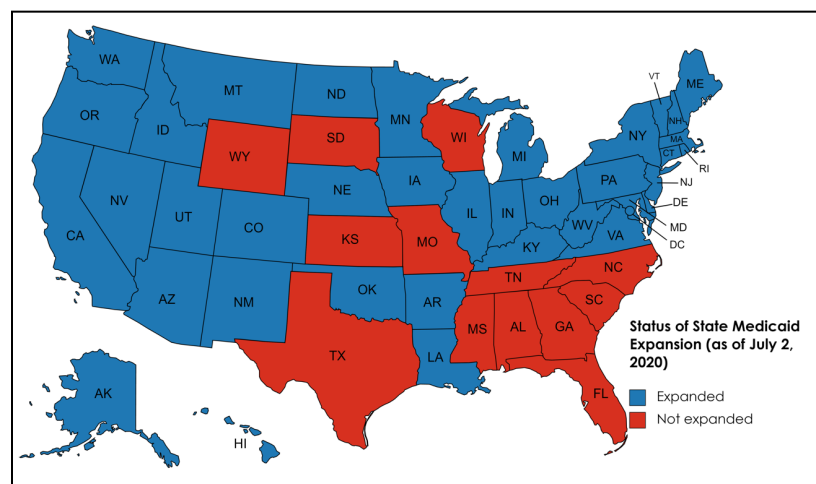
Results

Baseline Characteristics of Respondents

This study initially identified 401,958 individuals. After excluding respondents who were older than the age of 65 and those who earned an income above 138 percent of the FPL, 203,379 individuals remained. Overall, more than 71% of the study population consisted of respondents who resided in Medicaid expansion states, compared to 28.17% who were residents of states that had not expanded Medicaid coverage through the ACA. Table 1 presents the demographic characteristics of the study sample, separately for respondents in expansion versus non-expansion states.

Table 1: Demographic characteristics of the study sample

Characteristic Variables	Expansion states		Non-expansion states
	n (%)		*n* (%)
Age ≤ 65	13657 (71.83)		5355 (28.17)
Gender			
Male	346 (38.9)		90 (33.0)
Female	543 (61.1)		183 (67.0)
Educational Attainment			
Less than high school	2801 (20.6)		1238 (23.2)
High School	5205 (38.2)		2062 (38.6)
Some College	3820 (28.1)		1473 (27.6)
College or More	1786 (13.1)		572 (10.7)
Race/ethnicity			
White, non-Hispanic	7094 (51.9)		2462 (46.0)
Black, non-Hispanic	1605 (11.8)		1245 (23.2)
Other, non-Hispanic	1897 (13.9)		521 (9.7)
Hispanic	3061 (22.4)		1127 (21.0)
Marital Status			
Married	2823 (20.8)		1142 (21.5)
Not Married	10725 (79.2)		4173 (78.5)
Children			
1 or More Children	6863 (50.3)		2908 (54.3)
No Children	6794 (49.7)		2447 (45.7)

Author's analysis of Behavioral Risk Factors Surveillance System 2020 survey data. This sample consists of all respondents below the age of 65 who earn an income at or below 138% of the FPL (*N*= 203,379).

Figures 1A-1D: Comparing Average Preventive Care Utilization in Medicaid Expansion and Medicaid Non-expansion States

Figure 1A: Approximately 28% of residents of Medicaid non-expansion states receive yearly flu shots and approximately 40% of residents of Medicaid expansion states receive yearly flu shots.
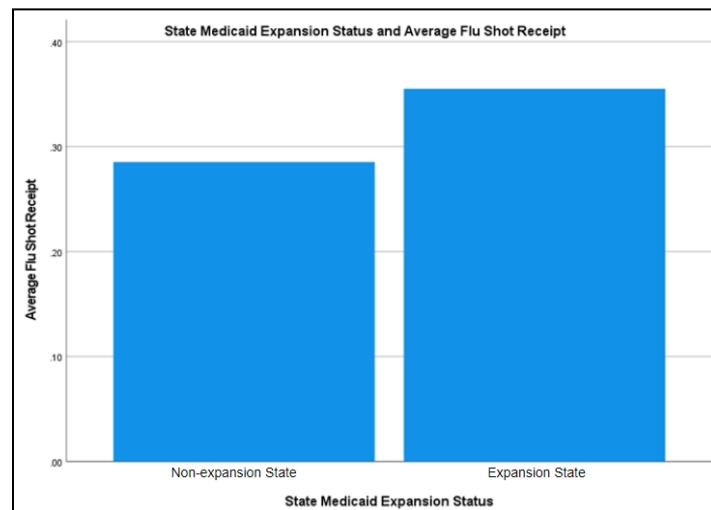

Figure 1B: Approximately 55% of residents of Medicaid non-expansion states receive the CDC's recommended number of HIV/STD tests and approximately 53% of residents of Medicaid expansion states receive the CDC's recommended number of HIV/STD tests.

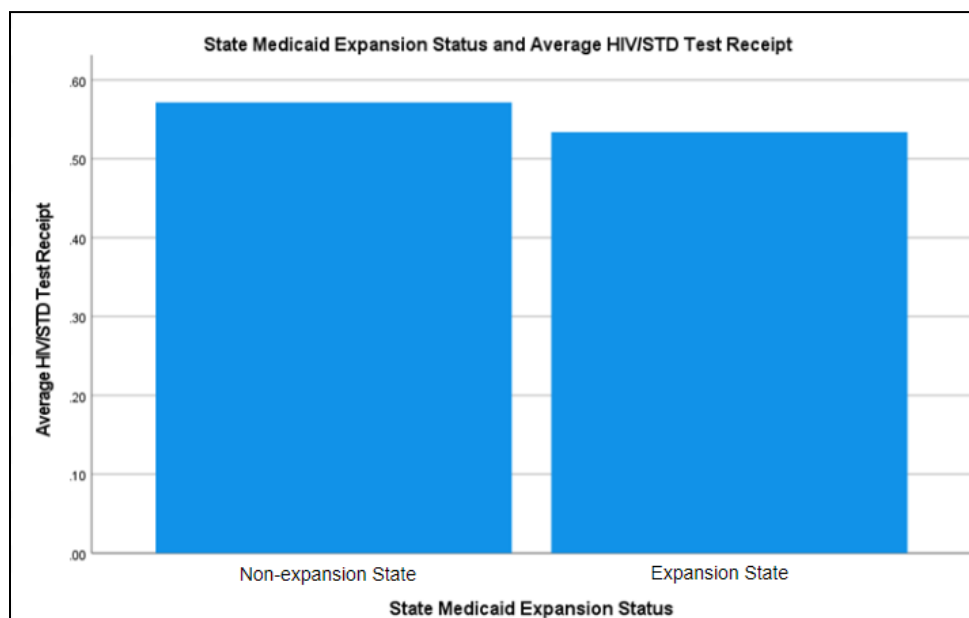*Figure 1C: Approximately 41% of residents of Medicaid non-expansion states visit the dentist each year and approximately 48% of residents of Medicaid expansion states visit the dentist each year.*
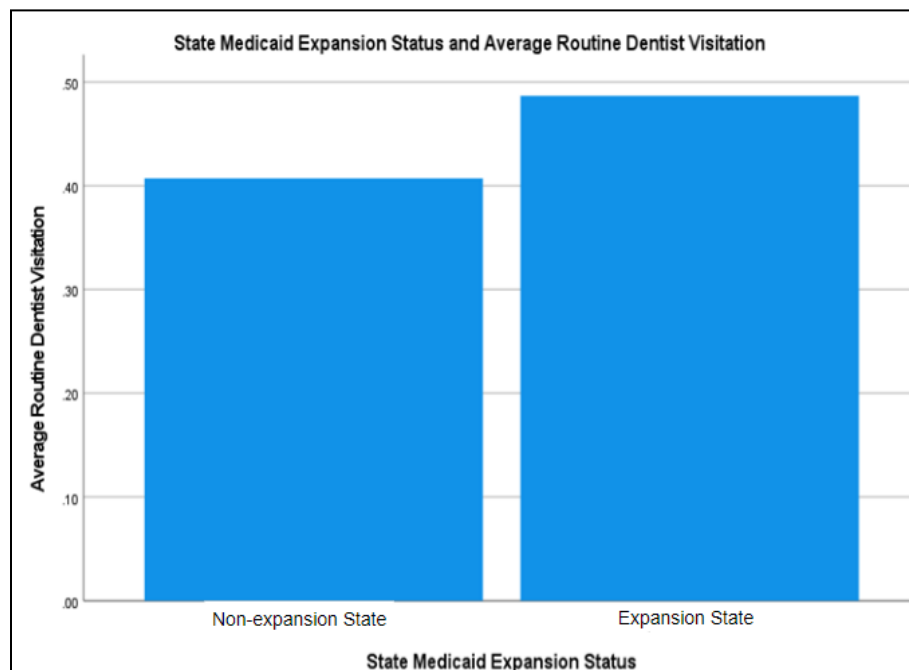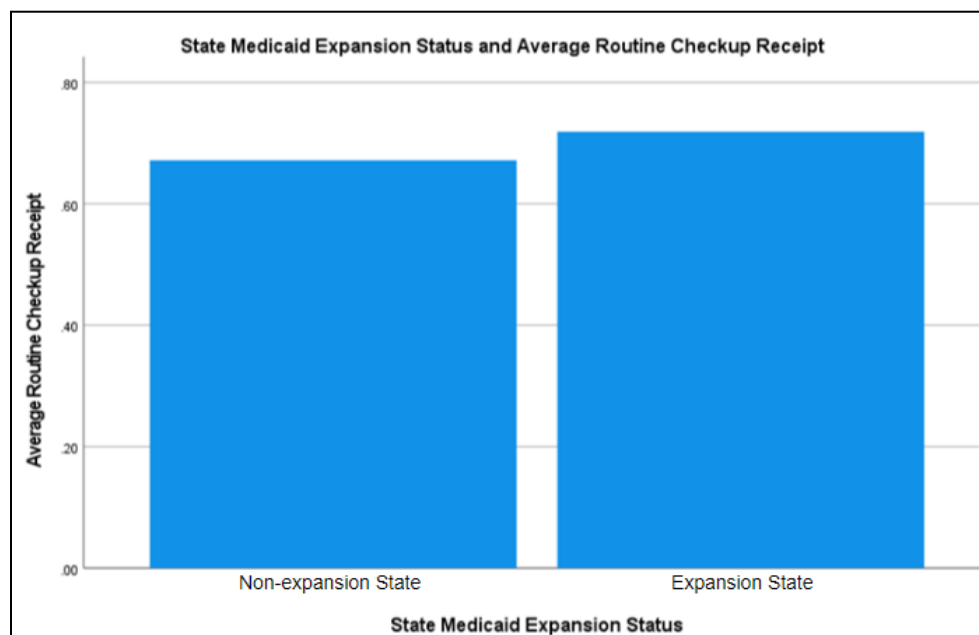

Figure 1D: Approximately 65% of residents of Medicaid non-expansion states receive yearly routine checkups and approximately 69% of residents of Medicaid expansion states receive yearly routine checkups.

Preventive Outcome Variable 1 Results: Flu Shot Receipt

According to the results provided in Table 2, there continues to be a statistically significant relationship between flu shot receipt and educational attainment (χ2 = 30.02, p < .001), race/ethnicity (χ2 = 63.45, p < .001), and having children (χ2 = 45.80, p < .001) are each statistically significant overall. When using race/ethnicity as a control, the relationship between state Medicaid expansion status and flu shot receipt is only statistically significant for the racial/ethnic groups of white (χ2 = 33.11, p < .001), Black (χ2 =9.94, p < .001), and Hispanic (χ2 = 35.52, p < .001). The relationship between the independent and dependent variable disintegrates among other, non-Hispanic respondents (χ2 = .905, p = .341). This illustrates an interaction pattern: the effect of the independent variable on the dependent variable is statistically significant for some values of the control (White, non-Hispanic, Black, non-Hispanic, and Hispanic), but not the value of "Other, non-Hispanic."

Author's analysis of data from the 2020 Behavioral Risk Factor Surveillance System survey. Results reflect chi-squared statistical test estimates for respondents below the age of 65 and who earn an income at or below 138% of the FPL.

Table 2: Chi-Squared Estimates of State Medcaid Expansion Status on Flu Shot Receipt.

Variable	Estimate	N	Cramer's V
Uncontrolled State Medicaid Expansion Status on Flu Shot Receipt	79.75**	17949	.067
Control Variables			
Gender	—	1138	—
Female	—	703	—
Male	—	413	—
Educational Attainment	30.02**	19227	.040
Less than high school	24.31**	3709	.080
High School	23.68**	6816	.059
Some College	14.25**	5021	.053
College or More	16.81**	2274	.086
Race/ethnicity	63.45**	19227	.057
White, non-Hispanic	33.11**	9106	.060
Black, non-Hispanic	9.94**	2658	.061
Other, non-Hispanic	—	3923	—
Hispanic	35.32**	3923	.095
Marital Status	—	19139	—
Married	—	3767	—
Not Married	—	14045	—
Children	45.80**	19277	.049
1 or More Children	50.62**	8779	.074
No Children	26.66**	9170	.055

*p < 0.05, **p < 0.01

Preventive Outcome Variable 2 Results: Routine Checkup Receipt

I hypothesized that in comparing individuals, low-income persons residing in Medicaid expansion states will be more likely to have received a routine checkup within the past 12 months than low-income persons residing in Medicaid non-expansion states in the year 2020. After performing a chi-squared test of significance to determine the interdependence of this relationship, I found that there is a weakly statistically significant relationship between the independent variable of state Medicaid expansion status and the dependent variable of routine

checkup receipt ($\chi2$ = 40.52, p < .001, φc = 0.047). After testing the control variables of gender ($\chi2$ = 5.10, p = .024), children ($\chi2$ = 15.61, p < .001), educational attainment ($\chi2$ = 22.52, p < .001), and race/ethnicity ($\chi2$ = 232.72, p < .001) against the dependent variable of routine checkup receipt, I found that these rendered statistically significant results and are therefore also affected routine checkup receipt.

When using race/ethnicity as a control variable, the relationship between Medicaid state expansion status and routine checkup receipt is only statistically significant for the racial/ethnic groups of white ($\chi2$ = 45.96, p< .05), Black ($\chi2$ = 7.23, p< .01), and Hispanic ($\chi2$ = 21.20, p< .01). Moreover, when utilizing educational attainment as a control variable, the relationship between the independent and dependent variables are only statistically significant for those who have received a high school education ($\chi2$ = 28.73, p < .01), some college ($\chi2$ = 5.18, p< .05), and college or more ($\chi2$ =12.48, p< .01).

Author's analysis of data from the 2020 Behavioral Risk Factor Surveillance System survey. Results reflect chi-squared statistical test estimates for respondents below the age of 65 and earn an income at or below 138% of the FPL.

Table 3: Chi-Squared Estimates of State Medicaid Expansion Status on Routine Checkup Receipt.

Uncontrolled State Medicaid Expansion Status on Routine Checkup Receipt	40.52**																				
Control Variables																					
Gender	5.10*																				
Female	—																				
Male	—																				
Educational Attainment		22.52**																			
Less than high school		—																			
High School			28.73**																		
Some College			5.18*																		
College or More			12.48**																		
Race/ethnicity				232.72**																	
White, non-Hispanic					45.96**																
Black, non-Hispanic					7.23**																
Other, non-Hispanic					—																
Hispanic					21.20**																
Marital Status					—																
Married						—															
Not Married						—															
Children							15.61**														
1 or More Children							22.67**														
No Children							16.21**														
N	18707	1163	717	426	19991	3966	7150	5204	2335	20044	9382	2,816	2374	4125	19901	—	—	20,044	9623	9084
Cramer's V	.047	.066	—	—	.034	—	0.06	.032	.073	.108	.070	.061	—	.072	—	—	—	.028	.049	.042

*p <0.05, **p <0.01

Preventive Outcome Variable 3 Results: HIV/STD Testing

In order to examine the effect of the independent variable of state Medicaid expansion status on the dependent variable of HIV/STD test receipt, I hypothesized that comparing individuals, low-income persons residing in Medicaid expansion states will be more likely to have received at least one HIV/sexually transmitted disease test between the ages of 13 and 64 than low-income persons residing in Medicaid non-expansion states in the year 2020. According to the chi-squared statistical test calculations, there is a statistically significant relationship between the uncontrolled relationship between HIV/STD test receipt and state Medicaid expansion status ($\chi2 = 19.85$, $p < .001$). Albeit the relationship is one that is very weak, as indicated by the Cramer's V value of 0.034. Since this uncontrolled test of the independent variable on the dependent variable rendered a significant result, I proceeded to test each control variable against the dependent variable of HIV/STD test receipt. These results demonstrate that there is a statistically significant relationship between HIV/STD test receipt and all control variables of gender ($\chi2 = 20.77$, $p < .001$), educational attainment ($\chi2 = 72.31$, $p < .001$), race/ethnicity ($\chi2 = 307.24$, $p < .001$), marital status ($\chi2 = 47.83$, $p < .001$), and children ($\chi2 = 76.33$, $p < .001$).

When evaluating the relationship between state Medicaid expansion status and HIV/STD test receipt when controlling for gender, there is a statistically significant relationship for females ($\chi2 = 5.07$, $p = .024$, $\varphi_c = .139$), however, there is a statistically insignificant relationship for males ($\chi2 = .147$, $p = .702$). Further, there is a statistically significant relationship for only two levels of the control variable of educational attainment: high school ($\chi2 = 17.78$, $p < .001$) and some college ($\chi2 = 3.97$, $p = .05$). In regard to race/ethnicity, the relationship between state Medicaid expansion status and HIV/STD testing remains statistically significant for the values of white ($\chi2 = 5.60$, $p = .05$), Black ($\chi2 = 4.31$, $p = .05$), and other ($\chi2 = 18.97$, $p = .01$). The values of these control variables all provide sufficient evidence to support the existence of an interaction relationship. However, there is an additive pattern that emerges when evaluating the relationship that exists between state Medicaid expansion status and HIV/STD test receipt when controlling for marital status. The statistics of the control variable of marital status bespeak an additive pattern as the relationship of the independent variable of state Medicaid expansion status on HIV/STD testing is of the same strength and direction for both values of the control variable: married ($\varphi c = .05$) and not married ($\varphi c = .03$). A similar additive relationship exists for the control variable of having children—controlling for parenthood does not change the strength of the relationship between the independent and dependent variables.

Author's analysis of data from the 2020 Behavioral Risk Factor Surveillance System survey. Results reflect chi-squared statistical test estimates for respondents below the age of 65 and earn an income at or below 138% of the FPL.

Table 4: Chi-Squared Estimates of State Medicaid Expansion Status on HIV/STD Test Receipt

	Chi-Squared	N	Cramer's V
Uncontrolled State Medicaid Expansion Status on HIV/STD Test Receipt	19.85**	17014	.034
Control Variables			
Gender	20.77**	1070	.139
Female	5.07*	655	.088
Male	—	395	—
Educational Attainment	72.31**	18267	.063
Less than high school	—	3558	—
High School	17.78**	6483	.062
Some College	3.97*	4762	.029
College or More	—	2166	—
Race/ethnicity	307.24**	18313	.130
White, non-Hispanic	5.60*	8582	.026
Black, non-Hispanic	4.31*	2528	.041
Other, non-Hispanic	18.97**	2165	.094
Hispanic	—	3739	—
Marital Status	47.83**	18184	.061
Married	7.668**	3535	.047
Not Married	12.995**	13351	.031
Children	76.33**	18313	.065
1 or More Children	13.12**	8695	.039
No Children	5.16*	8319	.025

*$p < 0.05$, **$p < 0.01$

Preventive Outcome Variable 4 Results: Dental Visits

The uncontrolled relationship between dental visits and state Medicaid expansion status is statistically significant ($\chi2 = 96.29$, $p < .001$). Upon testing each control variable against the dependent variable of dental visitation, it was revealed that there is a statistically significant relationship between educational attainment ($\chi2 = 242.76$, $p < .001$), race/ethnicity ($\chi2 = 40.75$, $p < .001$), and parental status ($\chi2 = 13.75$, $p < .001$) with dental visitation. Although when educational attainment was used as a control variable, there was only a statistically significant relationship for the values of less than high school, high school, and some college but not the other values.

Author's analysis of data from the 2020 Behavioral Risk Factor Surveillance System survey. Results reflect chi-squared statistical test estimates for respondents below the age of 65 and earn an income at or below 138% of the FPL.

Table 5: Chi-Squared Estimates of State Medicaid Expansion Status on Dental Visits

	Chi-Squared	N	Cramer's V
Uncontrolled State Medicaid Expansion Status on Dental Visits	96.28**	18721	.072
Control Variables			
Gender	—	1167	—
Female	—	712	—
Male	—	432	—
Educational Attainment	242.76**	20023	.110
Less than high school	31.52**	3961	.089
High School	25.37**	7141	.060
Some College	32.17**	5234	.078
College or More	—	2333	—
Race/ethnicity	40.75**	20076	.045
White, non-Hispanic	66.27**	9413	.084
Black, non-Hispanic	13.95**	2798	.071
Other, non-Hispanic	—	2384	—
Hispanic	40.34**	4126	.099
Marital Status	—	19834	—
Married	—	3911	—
Not Married	—	14669	—
Children	13.75**	20076	.026
1 or More Children	71.96**	9637	.086
No Children	29.93**	9084	.057

* $p < 0.05$, ** $p < 0.01$

Discussion

Medicaid expansion through the ACA has the capability to greatly improve the quality of life of low-income adults by improving their ability to access and afford comprehensive preventive healthcare services. In its sixth year of implementation, ACA-facilitated Medicaid expansion was accompanied by increases in low-income childless adults' ability to utilize preventive healthcare services, specifically influenza vaccination, routine checkup receipt, dental visitation, and HIV/STD testing.

Preventive Care Outcome 1 Discussion: Flu Shot Receipt

The chi-squared statistical analyses conducted during my research revealed that there is a statistical association for each separate control variable of educational attainment, race/ethnicity, and children when tested against the dependent variable of flu shot receipt. First, due to inconsistencies in scales that researchers used to measure educational attainment, there is a mixture of literature about the association between educational attainment and vaccination uptake: some authors conclude that individual education level does not influence inoculation uptake while others report the contrary (Nagata et al. 2013; Bennett et al. 2009). My research illustrates the existence of a consistent relationship between state Medicaid expansion status and flu shot receipt when controlling for all values of educational attainment: less than high school, high school, some college, and college or more. The overall percentage of those with less than a high school education who lived in a Medicaid non-expansion state who received flu vaccination is 25.2%, but this increases to 33.2% for respondents who reside in Medicaid expansion states.

The second-highest increase in vaccination among Medicaid non-expansion and expansion state residents was visible upon reviewing the overall percentages of those who had received a college education or higher. The overall percentage of those with a college education or higher who resided in a Medicaid non-expansion state who received an influenza vaccination was 31.0% while 40.7% of those in Medicaid expansion states received the vaccination: a 9.7% increase. Higher educational levels have been associated with higher influenza vaccination uptake due to these individuals having more access to regular preventive healthcare resources, greater awareness about health-promoting behaviors, and the conviction to directly ask their provider to administer the vaccine to them (Mullahy 1999; Bennett et al. 2009).

Finally, the statistically significant relationship between Medicaid expansion and flu shot receipt remains intact when individually controlling for both values of parental status. The overall percentage of respondents who do not have children and who live in a Medicaid non-expansion state who received an influenza vaccine was 31.7% while 37.7% of those without children in Medicaid expansion states received the vaccine. Upon examining respondents who have one or more children, 25.8% of those who reside in Medicaid non-expansion states received the influenza vaccine while 33.3% of those in Medicaid expansion states did. These increases in vaccination uptake reveal the unambiguous pattern that Medicaid expansion supported both adults who did have children and adults who did not have children in receiving influenza vaccination. However, the effect that Medicaid expansion has on influenza vaccination is stronger ($\varphi c = .074$) when controlling for an individual having one or more children than when one does not have children ($\varphi c = .055$). This finding contrasts with existing literature that purports that vaccine hesitancy is greatest among individuals who have young children. This is ascribable to the population holding hesitant views about vaccination due to their fear of the side effects that the vaccine may cause in their own bodies and in that of their children (Luyten, Bruyneel, and Jan van Hoek 2019; Azizi, Kew, and Moy 2017). I suspect that my research revealed the opposite effect as a result of increased efforts fomented by public health officials to ward off a "twindemic" of COVID-19 and influenza during the 2020-2021 flu season (Kuehn 2021, 2465). This aggressive public health campaign has altered past trends of influenza vaccination hesitancy (Kuehn 2021, 2465). In New York City, there was a 13% increase in the administration of influenza vaccination doses among adults aged 18 to 64 years old and a 9.5% increase among adults aged 65 years or older (Kuehn 2021, 2465). Data from the National Immunization Survey confirms that this similar flu vaccination trend occurred on a national level (Kuehn 2021, 2465).

Preventive Care Outcome 2 Discussion: Routine Checkup Receipt

There are remarkable differential effects of state Medicaid expansion status on routine checkup receipt across the control variable of gender. Although the relationship between the control variable of gender against the dependent variable of routine checkup receipt is statistically significant, the relationship disintegrates upon examining the relationship between Medicaid expansion status and routine checkup receipt when controlling for gender, producing a spurious relationship. The overall percentage of males who reside in Medicaid non-expansion states who received routine checkups is 76.4%, but this decreased by 3.1% to 73.3% for males who resided in Medicaid expansion states, contradicting the hypothesis that I had proposed. A reversed pattern emerged for females as 77.5% of females who reside in Medicaid non-expansion states received a routine checkup, which is 3.6% lower than the 81.1% of females

in Medicaid expansion states who received a checkup. Prior studies have suggested that these gender-based differences may be attributable to the management of gynecological and reproductive issues, which are health problems that are uncommon in males (Daher et al. 2021, 5). Men are also less likely to have a primary care physician than women (Daher et al. 2021; Bertakis et al. 2000; Xu and Borders 2003).

Preventive Care Outcome 3 Discussion: HIV/STD Test Receipt

HIV and sexually transmitted disease (HIV/STD) testing are a cornerstone of public health promotion and intervention. Among low-income, nonelderly adults, my research evidences that the relationship between state Medicaid expansion status and HIV/STD test receipt remains significant when controlling for gender, educational attainment, race/ethnicity, marital status, and having children. Historically, sexually transmitted diseases disproportionately affect women as they have a higher biological risk of contracting HIV and sexually transmitted infections than men (Coombs, Reichelderfer, and Landay 2003, 455). Due to their genetic predisposition to sexually transmitted diseases, women are more socially and medically encouraged to regularly receive HIV/STD tests, while men receive less advice to partake in this preventive health service (Knight et al. 2016, 2). This difference creates a disparity between men's and women's engagement with HIV/STD testing services. The results of my research conform with this as I found a statistically significant relationship between state Medicaid expansion status and HIV/STD test receipt when controlling for females ($\chi2 = 5.07$, $p = .05$), but not males.

Preventive Care Outcome 4 Discussion: Dental Visits

In order to ensure the maintenance of healthy teeth and gums, it is imperative that Americans be able to regularly access dental healthcare services. This provides dental practitioners with the opportunity to detect cavities, treat the progression of gum disease, and remove dental decay.

Most compellingly, an individual's status as a parent to one or more children ($\varphi c = .086$) is a stronger predictor of dental visitation than being an adult without children ($\varphi c = .057$). Of respondents who do not have kids and live in a Medicaid non-expansion state, 40.5% have received a routine dental visitation. This is 6.3% lower than respondents who reside in Medicaid expansion states and do have children. In addition, the overall percentage of respondents who have children and are located in a Medicaid non-expansion state who receive routine dental visits is 40.9%, which is 9.4% lower than the 50.4% of adults with children in Medicaid expansion states that receive routine dental visits. This conforms with existing literature that predicts that parents in Medicaid expansion and non-expansion states were both more likely to receive an annual dental visit than childless adults in Medicaid expansion and non-expansion states in 2010 and 2014 (Singhal, Damiano, and Sabik 2017, 728).

Conclusion & Limitations

The chi-squared statistical tests revealed that in the sixth year of the ACA-facilitated Medicaid expansion, state Medicaid expansion is associated with an increase in preventive care utilization for the four preventive health outcomes that I tested: flu shot receipt, routine checkup receipt, HIV/STD testing, and regular dentist visitation. The results of my research conform to the framework proposed by scholars Wherry and Miller (2016), Gai and Marthinsen (2019), and Cawley, Soni, and Simon (2018) who determined that residents of Medicaid expansion states are

more likely to utilize preventive care services than their non-expansion counterparts due to the law of demand and problem of moral hazard.

My results contrast with earlier studies that have utilized two or three years of post-Medicaid expansion status (Courtemanche et al. 2018; Simon, Soni, and Cawley 2017; Cawley, Soni, and Simon 2018). These short-run studies did not demonstrate that Medicaid expansion affected the studied health behaviors. However, changes in health habits manifest over a longer time frame, which may not have been able to have been captured by these studies as they were conducted in the early years of Medicaid expansion. Additionally, Figueroa et al. (2021) determined that Medicaid non-expansion states experienced higher uninsurance rates and greater health disparities than Medicaid expansion states during the COVID-19 pandemic. But, these authors solely focused on comparing a small set of health outcomes in four Southern states. My research addresses this shortcoming by probing the effect that Medicaid expansion had on a broad set of health outcomes using all 50 states in America, controlling for five variables of sex, educational attainment, marital status, race/ethnicity, and having children.

Although the results of my research do find there to be a statistically significant impact of Medicaid expansion on the utilization of the aforementioned preventive care services, two limitations should be considered. First, the data acquired from the 2020 BRFSS is self-reported, which could introduce social desirability bias. Social desirability bias increases the tendency of respondents to provide answers that they deem to be more socially acceptable to present themselves in a favorable manner, even if it is untruthful. Second, this study is focused on evaluating the effects that Medicaid expansion had on low-income adults who are younger than 65, meaning that the results of my research may not generalize to populations beyond this sample. Third, I defined a Medicaid expansion state as one that had voted by July 2, 2020, to expand its Medicaid coverage. Therefore, although Medicaid coverage did not commence in Oklahoma until July 1, 2021, I still included the state as a Medicaid expansion state since it had voted to expand Medicaid by July 2, 2020.

Despite these limitations, there are important implications that this research has for policymakers, healthcare professionals, and researchers. As the results of my research demonstrate the considerable benefits that Medicaid expansion through the ACA has on low-income adults' ability to engage in healthy behaviors. Although the direct effect of Medicaid expansion is to support low-income adults' ability to receive health care, such as preventive care, there are spillover benefits that are also reaped by populations insured through Medicaid (Buchmueller, Cliff, and Levy 2020, 1). These benefits include experiencing a higher level of economic well-being, decreased personal debt, and higher credit scores (ibid). These well-documented benefits illustrate the presence of an inextricable link between physical and financial health. It is imperative that public leaders utilize this information to fiercely advocate for the remaining 12 Medicaid non-expansion states to expand their Medicaid programs through the ACA to ensure that their vulnerable low-income populations, and their families, can access affordable and comprehensive health care. Lastly, as future researchers replicate this study, there is an opportunity to supplement my results by exploring the mechanisms that explain the statistically insignificant relationship between Medicaid expansion and mammogram screenings as well as Medicaid expansion and Pap test receipt. Relatedly, since my research principally concentrated on exploring the effect that the ACA has on preventive healthcare utilization, future researchers could investigate the effect that the ACA has on different types of medical appointments, such as reactive healthcare visits and palliative healthcare visits.

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THE INFLUENCE OF CELTIC MYTHOLOGY ON THE IRISH NATIONALIST MOVEMENT

Melina Reilly

Abstract

Celtic mythology and history played a pivotal role in shaping Irish culture in its pre-colonization period. After the British invasion, the collection of practices and legends that make up Celtic mythology was lost for many centuries. However it faced a revival after the Great Famine when the Irish nationalists used this Celtic history to bolster support. Irish nationalism, more specifically the fight for Irish independence against Great Britain, is a fundamental part of their history, and source of pride for many Irish people. This paper explores the connection between these two pivotal periods of Irish history by answering the question: how did the themes of Celtic mythology shape the Irish nationalists' competing narratives that resulted in the fight for the 1921 Independence? Through a narrative analysis of themes presented in written documents, poetry, and posters from the nationalist movement during this time frame, this paper found that nationalists referenced Celtic mythological themes in propaganda to build a sense of Irish pride and inspire resistance, while simultaneously depicting the British as cruel. This paper provides a deeper understanding of Irish nationalism and builds on the scholarship surrounding mythology's influence on political development.

Keywords: Mythology, Ireland, Nationalism, Celtic, Narrative Analysis, History, Propaganda.

Introduction

Irish nationalism, and more specifically the fight for Irish independence against Great Britain, is a fundamental part of Irish history and source of pride for many Irish people. A pivotal moment for the Irish nationalist movement was the Irish War of Independence fought against Great Britain from 1919 to 1921, which ultimately resulted in the Republic of Ireland (excluding the Loyalist dominated province of Ulster which became Northern Ireland) gaining independence in 1921 (Dorney 2012). Celtic mythology was an important part of Irish culture pre-colonization, and war later revived it to be an important driver of Irish nationalism. The Celts lived in Ireland during the Iron Age and developed a complex and intricate mythology that shaped their way of life. Sometimes referred to as "Gaelics" due to their Gaelic language, many scholars distinguish the Celts' culture as Celtic to refer to the people, but both Gaelic and Celtic are common descriptors of these ancestors to the modern Irish people (Adams Media Corporation 2017, 9-12). This paper will use the term Celtic to describe this group of people. Celtic culture includes legends about Ireland's history, mythological gods and goddesses, and instructions on the people's relationship to their land. This collection of practices and legends comprise Celtic mythology. After the invasion of the British in 1169, this part of Irish history was lost for many centuries as the British colonized the country. It then experienced a revival after the Great Famine as nationalists used it as a means to redefine Irish culture free from British influence (Matthews and Matthews 2001, 32). Celtic history and culture are part of Irish pre-colonization history and still influences modern Irish society.

This research looks at the Irish nationalist movement's response to British colonialism through the lens of Celtic mythology. More specifically, it examines the different ways in which the Irish nationalists expressed Celtic mythological themes and their effect on nationalist narratives. The topic of this study centers on the influence of Celtic mythology on the historic development of Irish nationalism, specifically in how the themes of Celtic mythology influenced the ways in which the Irish viewed themselves and the British. Previous literature has often overlooked Celtic mythology in the study of the Irish nationalists' development, weakening the analysis of nationalists' discourse and dialogue.

This paper explores the connection between these two pivotal periods of Irish history by answering the question: how did the themes of Celtic mythology shape the Irish nationalists' competing narratives that resulted in the fight for the 1921 Independence? Competing narratives refers to the narratives that the nationalists promoted about themselves versus the narratives they promoted about the British. This paper hypothesizes that nationalists used Celtic mythological themes to build support for their cause and united people in various ways. In the context of other scholarship, this research provides a relevant case study into the level of importance mythology plays in shaping national identity and political development. In addition to expanding the research into Irish nationalism, a keystone feature of Irish politics and culture, this paper brings to light some of the lost and overlooked cultural history of the Irish people and further enriches the conversation surrounding Ireland's cultural past and its influence on the present. Ireland is a particularly puzzling case because its history is deeply rooted in both pagan Celtic mythology and Catholicism. Some scholars analyze other mythologies' influences on nationalist movements in various countries; their research provides rich insights into how a group expresses views of themselves versus others and how they define their values. This research takes place within that broader discussion. When examining the literature on mythology, this research builds on

previous scholars' works by applying their findings to the case of Ireland and including more themes from Celtic mythology.

Literature Review

British colonization included many waves that centered around destroying Irish culture, including the loss of many Celtic oral traditions, written stories, songs, and rituals. Throughout history, many nationalist groups and scholars have worked to recover some of this lost history, and while there is some discussion around Irish mythology's influence on nationalism, this field is still quite small. The research into Celtic mythology's influence on Irish nationalism expands this field and draws on literature that examines other mythologies' relationship to nationalism as well as the development of Irish nationalism. Some analysis of previous work in these fields will provide background to better understand the larger context of this research. The following literature review explores three different concepts relating to this topic. The first features scholars who examine the role of Celtic mythology and folklore themes in the development of Irish culture, specifically the growth of the nationalism movement throughout Irish history. The second section looks at the study of nationalist movements outside of Ireland and examines the role mythology played in those movements. The findings in this field demonstrate how various mythological themes were incorporated into nationalist movements through rhetoric, literature, and art. Finally, the third section will engage with sources discussing the lenses other than mythology through which to view the culture and development of Irish nationalism, especially its history and the ways in which the movement voiced its goals.

The Study of Celtic Mythology

Celtic mythology was the primary religion of the Celts during the Iron Age. Celtic mythology is the broader context in which many Irish folklore stories have been based. The Celts' ideology, like other religious mythologies, centered around various legends of gods and goddesses, creation myths, tales of heroes, ritualistic practices, and histories of their ancestors. Historians define the Celts not by physical characteristics but rather by certain shared linguistic traits and similar languages, which include Irish, Welsh, Scot Gaelic, Cornish, Manx, and Breton (Adams Media Corporation 2017, 9). The term Gaelic refers to the languages the Celts spoke, while Celtic refers to the people's cultures and way of life. The Celts based their societies on tribal groups called *tuatha*, which generally referred to a miniature kingdom with families descending from shared ancestors; thus, most stories and themes from Celtic mythology center around family ties and ancestral connections (Adams Media Corporation 2017, 11). The Celts passed down ancient mythological stories through oral tradition; while this sacred tradition was originally highly secret, it eventually became less formal and has thus spread among a wider population (Adams Media Corporation 2017, 14). The majority of Celtic mythology is organized into three major texts: the Mythological Cycle, the Ulster Cycle, and the Fenian, also called Fionn, Cycle (Adams Media Corporation 2017, 14). Historians go on to explain the tales in each of these major texts and other common themes across Celtic mythology in *The Book of Celtic Myths*. While there is generally a good understanding of the history of Irish folklore by the authors of *The Book of Celtic Myths*, its view and interpretation are limited to history and lack analysis that links it to modern Irish politics and culture. Further research is required to build on this general understanding of Celtic mythology and in order to link it to other historic Irish movements.

The study of folklore, particularly in Ireland where Catholicism took such strong roots, is often discarded by scholars as irrelevant to the study of Irish culture. However, historians Gearóid Ó Crualaoich and Diarmuid Ó Giolláin counter this claim in their work that traces the mythological roots of Irish heritage and cultural development (Ó Crualaoich and Diarmuid Ó Giolláin 1988, 68-71). They argue that the study of Celtic mythology is valuable to Irish popular culture "[b]ecause of its symbolic richness, its validity of expression and the copious nature of its material and documentary remains, it offers historians and social scientists a valuable resource" for studying the technical, economic, political, and structural entities that have dominated most of Irish history (Ó Crualaoich and Diarmuid Ó Giolláin 1988, 71). Their work emphasized that the study of Celtic mythology has intrinsic value because it is a form of raw human expression which later become incorporated in politics and modernization (Ó Crualaoich and Diarmuid Ó Giolláin 1988, 74). Ó Crualaoich and Diarmuid Ó Giolláin's piece brought the importance of Celtic mythology into academia and expanded the view of Irish folklore as an important study.

When looking at Celtic mythology's influence on Irish culture, certain themes appear prominently and create a sense of identity. Michael Dielter explains how the Celtic themes of rallying people together, tying people to the land, and connecting life with death, played a prominent role in modern Irish culture (Dielter 1994, 584). Through an analysis of historic interactions which the Irish had with other countries, he concludes that certain Celtic values, such as the development of community-based identity, strengthen nationalism over time as the Irish identity evolved within the context of the greater European community (Dielter 1994, 595-599). As his work has a strong archeological base, Dielter doesn't expand into much detail about how Celtic mythology, or what specific aspects or myths, influenced Irish nationalism. Martin Williams fills these gaps by examining the role of Celtic hero tales in Irish writing around the revolution (Williams 1983, 307-310). Williams analyzes how various nationalist poets such as Shane Leslie, Joseph Campbell, and Seumas MacManus romanticized rebellion and inspired soldiers through the use of heroic myths (Williams 1983, 317-323). He concluded that heroic myths "were taken up by the nationalists and used to elevate the tone of the whole struggle against the British," and this explains how, and why, the Irish began incorporating some Celtic legends of heroes into their propaganda and discourse in the years leading up to the War of Independence (Williams 1983, 328). The focus on Celtic heroic myths seems a natural subsection of mythology to focus on because these myths often centered around battle cries to defend one's home or the duty and honor of dying in battle; all of which provided inspiration for nationalists and seems fitting to appear in their propaganda or discourses.

Williams' conclusion took the study of Celtic mythology's influence on Irish nationalism during the period of revolution in a new direction. But, the study was quite limited as it focused solely on heroic myths, excluding creation myths and the values of Celtic gods and goddesses and ignoring the broader scope of Celtic mythology's influence on Irish culture. Later, Mary Thuente built off of Williams' ideas and expanded his analysis to include poems, songs, and various literature movements that emerged around the Easter Rising and reflected a range of Celtic myths (Thuente 1989, 43-46). For instance, poems and songs that emerged around the Easter Rising reflected Celtic creation myths and thus demonstrated that a true understanding of Irish nationalists' literature must include the exploration of spoken forms of Celtic mythological themes (Thuente 1989, 60). Contradicting other scholars, such as Williams and Dielter, who emphasize the importance of written work as opposed to oral, Thuente instead based her analysis on oral tradition because it was more widespread and commonplace (Thuente 1989, 55-60). This

dependence on oral tradition is a source of some contention between scholars, where some scholars such as Williams, Dielter, Ó Crualaoich, and Ó Giolláin rely more heavily on written tests and hold the position that oral tradition is less reliable due to its undocumented nature. Nevertheless, Thuente was able to provide detailed songs and ballads to support her conclusion that a true understanding of how Irish nationalists appealed to popular opinion must include the exploration of spoken forms of Irish folklore, most notably the call for national unity (Thuente 1989, 60).

The study of Celtic mythology can further enrich the understanding of different literary movements that were influenced by Celtic themes. Mark Williams expanded on Thuente's work by researching the expansion of Irish folklore into different literature movements and countries. Specifically, the images of Celtic gods and goddesses that appeared in some British literature. Williams (2016) tracks the ways in which Celtic folklore continued in British literature, arguing that it was specific people, such as author Geoffrey Keating and poet Brian Merriman, who continued the images of Celtic gods and goddesses in British literature (Williams 2016, 277-282). Williams' (2016) documentation of Irish ideas and themes in British literature expanded on the understanding of mythology spreading beyond its country of origin.

Mythology and Nationalism in Foreign Countries

Scholars researching the links between and impact of mythology on nationalism or culture is by no means unique to Ireland; in fact, a lot of work has been done to examine the role of other mythologies and how those themes became embedded in various cultural movements. For instance, a prominent study from Michael Largey examines the role of heroic folktales in the Haitian revolution through "recombinant mythology," a process by which people use mythology to inspire heroic characteristics in others (Largey 2005, 334-339). Largey tracks the Haitian resistance against the United States occupation by citing the references composer Occide Jeanty made, most notably references about loyalty, courage, and bravery, that draw on the myths of Ogou and Dessalines, as he infused the heroic rhetoric into the defense of the Haitian nation with ideas from Haitian traditional religion. (Largey 2005, 328). His work is directly correlated to Martin Williams' (1983) article examining the role of Celtic heroic tales throughout the Irish nationalist movements; both trace the role of heroic themes as used by various native groups to inspire resistance against a colonial oppressor.

Turning towards mythology's unique adaptation to the political sphere of society, Allan Greer hypothesized that oppressed groups turn towards folklore as a way to cope with their culture that has been taken from them, as a way to build a sense of community against the "other" (Greer 1990, 43). Greer analyzes the French-Canadian ritual of the Charivaris, a type of performance or folklore custom, as it was used to mock the British in the mid 1800s (Greer 1990, 26-30). Through his analysis of this physical resistance, Greer concludes that the physical and whimsical form of expression granted by this cultural practice allowed people to come together and provided a framework for people to revolt and assert their heritage into political movements (Greer 1990, 43). This is a uniquely interesting study as not many other scholars focus on, or even incorporate, physical expressions of mythological themes or rituals into their study. Analysis of expression beyond spoken or written words to incorporate physical expressions of mythological themes provides an interesting perspective to the study of mythology because often these artistic acts connect people on a deeper basis.

The adoption of mythology into political movements is not always tied to nationalism, and it is not always linked to the mythology from that movement's country of origin. Wei Zhang looks at how Chinese writer Zuoren's translation of Greek mythology to Chinese influenced the documentation of two critical cultural movements in modern Chinese history: the May-Fourth movement and post-1949 cultural revolution (Zhang 2015, 100). Zhang concludes that the translation of Greek myths brought with them a glorification of heroic deeds, natural religious beliefs, and the ideas of free thought, which shaped the ways in which various authors wrote about modern Chinese history (Zhang 2015, 113). This work shows how the values and motifs of Greek mythology subtly influenced the framing and mindset of individual's responses to their political situation. Juxtaposed to Largey's and Greer's studies on how mythology inspired political resistance and movements used it to inspire citizens, Zhang's work offers a more practical application for cases where mythology can subtly change mindsets because in most other cases, there aren't distinct "before myth" and "after myth" periods to compare.

While scholars have various conclusions about the impact and degrees of mythology's role in shaping culture, the incorporation of mythology into culture, while it might not be obvious, does occur in subtle ways when groups can identify similarities between characters in mythology and themselves (Zhang 2015, 113-114). While none of these conclusions were drawn with Ireland and Celtic mythology in mind, they can be applied to Celtic mythology and Irish nationalism all the same, as they demonstrate that mythology impacts cultural development, political resistance, and competing narratives. The study of Celtic mythology's influence on Irish nationalism would involve this larger area of study and strengthen the conclusion that mythology impacts cultural development and political resistance.

Cultural Approaches to Irish Nationalism

This final section of the literature review provides a foundation for alternative viewpoints, outside of mythology, through which to view the culture of Irish nationalism. Historic analysis of the nationalists' development contributes to understanding where politics stand in Ireland today (Bradshaw 1989, 341; English 2011, 447). The nationalists' poignant response to British colonialism and various tragedies helped strengthen the pride of Irish nationalism throughout the country (English 2011, 453). Irish nationalists advocated and rebelled for decades, ultimately resulting in the War of Independence from 1919 to 1921, which ended with the Anglo-Irish Treaty granting independence (English 2011, 448). The longevity of Irish nationalism stems from the Irish response to British colonialism, most notably the ending of British colonialism via the Anglo-Irish Treaty and Partition in 1921 (English 2011, 453). This act, while granting part of Ireland independence, also divided the six counties of Northern Ireland from the rest of Ireland and sparked the Irish Civil War (English 2011, 454-457). The two sides of the civil war, a pro-treaty Provisional Government and an anti-Treaty Irish Republican Army, had conflicting levels and cultures of nationalism that caused them to view Partition differently; these two groups still stand as the basis of the dominant political parties in Ireland today (English 2011, 454-459).

An important aspect in the development of Irish nationalism involves the way in which it vocalized the goals, reactions, and narratives of British colonialism leading up to Partition. When discussing studies of Irish nationalist discourse it is important to distinguish which areas of Ireland are being studied. The nationalist sentiments in Northern Ireland are often stronger but not much different from the sentiments in the Republic of Ireland. The analysis of discourse in

Northern Ireland provides a good framework for the discourse analysis of mythology in Irish nationalism because it highlights how this group shaped their view of their political circumstances and used their cultural differences to rally against British political forces. Stefanie Lehner and Cillian McGrattan investigate this topic in their work on the victimization in Irish literature to show how nationalists shaped discourse around their perceptions of themselves versus others in Northern Ireland (Lehner and McGrattan 2012, 39). While focusing specifically on victimization literature and the nationalist's creation of an "us vs. them" mentality, the vocalization of rebellion offered Irish nationalists in Northern Ireland a form of expression while they were under British rule for many decades following the Independence of 1921 (Lehner and McGrattan 2012, 50). Their conclusion that vocalization of rebellion offered Irish nationalists a form of expression aligns with Greer's study into the importance of the Charivaris and how the expression provided a framework for people to revolt and assert their political thoughts (Lehner and McGrattan 2012, 45-51; Greer 1990, 43). While they focus specifically on resources in Northern Ireland, their conclusions can be applied to nationalism in the Republic of Ireland as many of their sources are taken from Ulster before Partition, and the sentiments among nationalists are not much different between the Republic of Ireland and Northern Ireland. Lehner and McGrattan's work on discourse analysis of Irish nationalism in Northern Ireland provides a good framework for the discourse analysis of mythology in Irish nationalism because it highlights how this group shaped their view of their political circumstances and used their cultural differences to rally against British political forces.

In this third group of scholars who focus on Irish nationalist and cultural development, some scholars disregard mythological and folklore influences. For instance, Brendan Bradshaw applies mythical study to Ireland but concludes that ultimately other scholars have over-emphasized the role of mythology in Irish history and that it is of no value in accessing nationalism (Bradshaw 1989, 329- 336). His argument centers on the idea that the "Irish experience," their history and cultural identity development, has been based around their response to tragedy rather than Celtic folklore (Bradshaw 1989, 337-342). Bradshaw bases his argument on the Irish's response to oppression and famine without acknowledging the role that folklore plays in psychology and people's interpretation of their surroundings as explained by Zhang. This paper by no means argues that Celtic mythology is the only important lens through which to view Irish nationalism, but Bradshaw's dismissal caused his conclusion to lack much of the cultural elements of the themes presented in Irish nationalists' goals and the culture of their organization.

Conclusions from Literature Review

The third group of scholars, who focus on Irish nationalist and cultural development, disregard mythological influences and criticize it as an over-emphasized part of Irish history (Bradshaw 1989, 329-336). Celtic mythology is not the only important lens through which to view Irish nationalism, but its absence from the study of Irish nationalism leads to an incomplete view of Irish cultural and political development. The scholarship of Irish nationalism is vast and relies on cultural influences, but this field often ignores Celtic mythology as part of that cultural heritage. Dietler, Williams, Ó Crualaoich, Ó Giolláin, and Thuente all highlight this lack of scholarship in their works. This paper hypothesizes that nationalists used Celtic mythological themes to build support for their cause and united people in various ways. This hypothesis not only answers the question of how Celtic mythological influenced nationalist narratives, but also bridges the gap in research by connecting nationalism with an understudied part of Irish history.

Discourse analysis into this subject will involve a larger discussion of the influence of mythology in nationalist movements in other countries and provide another case study to support the conclusions drawn by Largey, Zhang, and Greer in their work researching the role of mythology in other cultural movements. In isolation, both fields, Celtic mythology and Irish nationalism, lack the adequate research to connect these two vital pieces of Irish cultural and political development.

Methodology

This research uses a narrative analysis in order to explore how the themes of Celtic mythology shaped the Irish nationalists' competing narratives that resulted in the 1921 Independence. This approach is best suited to answer this research question because it allows for the collection of Irish nationalist stories and identification of trends of Celtic mythological influences across their narratives of how they viewed themselves and the British. It is important to note that this research examined the influence of Celtic mythological themes on recruitment of supporters for the nationalist cause; the eventual success of the nationalist cause with the independence of Ireland confirms that these recruitment efforts succeeded. This study specifically looks at Irish nationalism because this political ideology played a formative role in Irish identity, culture, and politics that is still seen today. Ireland as a case in the broader context of mythological studies provides an important examination into how lost mythologies can influence a people's culture even after they no longer widely practice the religion that the mythology originated from.

The narrative analysis included three types of sources: essays, poetry, and posters. This triangulation of data collection through the use of stories, posters, and poems strengthens this research as it shows the diversity of media the nationalists used that reflect Celtic Mythological themes. For all three data types, documents ranged from the years 1900-1921 the decades preceding the Irish Independence of 1921. I selected the documents based on several different criteria, including the popularity or fame of the author, the background of the author, and the type of source. I wanted to use more well-known authors because many other nationalist authors based their works off of these famous works. In the selection process, I pulled about 20 nationalist essays, posters, and poems from my time frame and narrowed down the selection to ensure that different documents reflect different parts of society and did not possess too many overlapping characteristics. I did not explicitly exclude any type of source from my analysis, but I was not able to get access to certain online archives which excluded newspaper articles and other documents from my analysis. I had to limit my sources due to time constraints, but I still tried to represent a wide breadth of documents. There is always the risk of overgeneralization when only using a limited number of sources, and while I tried to prevent this by choosing a large range of sources, there are variations within the nationalist ideology that may not be fully represented by these documents.

The analysis process of the selected documents involved highlighting every reference to Celtic mythological themes in each source. In order to ensure accurate analysis, this process required constant revisiting of documents to be strict and scrupulous to discern what was strong enough to be considered a reference to Celtic mythology and not just a general reference to common spiritual, or Catholic, ideas. Both Catholicism and Celtic mythology place symbolic meaning in soul, water, and resurrection or afterlife, but how they view these symbols is very different. For instance, Catholics view water as part of rebirth and cleansing while the Celts

viewed it as an extension of the soul for healing. When distinguishing Celtic mythology from Catholic ideas, I looked very closely at how these common symbols were portrayed and only included reference if they were played in alliance with Celtic mythology. Additionally, vague references to these objects, such as just the inclusion of water in a document but not an explanation or importance placed on it, were not included in data collection. While this limited the amount of references to Celtic mythology noted in my research, it was a necessary limitation because it prevented me from forcing a connection when there was not one in a source.

I used thematic analysis to investigate how the themes of Celtic mythology shaped competing narratives that resulted in the fight for the 1921 Independence. Again, these competing narratives were the narratives that the nationalists promoted about themselves versus the narratives they promoted about the British. I highlighted both direct and indirect references to Celtic mythology in nationalist essays, posters, and poems to see what effect these mythological themes had on nationalist propaganda. I specifically focused on how nationalist authors and artists used Celtic mythology to frame and portray themselves and their British oppressors.

Results

In this research, I analyzed three essays, three posters, and three poems ranging from 1904 to 1916.The written sources include *The Hero in the Man* by George William Russell, *To the Boys of Ireland* by Pádraic Pearse, and *The Murder Machine* by Pádraic Pearse. These sources were intended to publicize the politics of the Nationalist Party and often used inspirational tones and language to garner public support. In addition to written sources, I also analyzed posters to highlight the effects of Celtic mythology on visual documents and artistic representations within Irish nationalism. These posters include one from 1913 and two from 1916 (figures 1, 2, and 3 in appendix). These images were often posted around towns or published in nationalist newspapers to promote their values and inspire people to join the movement. For poems, I analyzed *To Ireland in the Coming Times* by W.B Yeats, *A Wave of The Sea* by Joseph Mary Plunkett, and *The Suicide* by Thomas MacDonagh. The inclusion of poetry was vital to this document analysis because the practice of poetry itself held a very special place in both Celtic mythology and the nationalist movement. Poets were highly valued in Celtic societies and bore the responsibility of passing on Celtic mythology through stories as well as art because poetry was considered a pure form of expression. The poets of Celtic tribes, often referred to as the "chosen," received their training from human predecessors as well as from spirits to guide them through their work (Matthews and Matthews 2001, 132). The tradition of poetry continued throughout all aspects of Irish history including the Irish nationalist movement, as many nationalists used poetry to express the emotional turmoil of the movement and muster support.

Several themes appeared throughout my research process across all of these sources. The main themes that demonstrate how Celtic mythology influences Irish nationalism include references to Celtic ideology, references to Ireland's Celtic past and society, and encouraging resistance and a call to action. This paper's hypothesis that nationalists used Celtic mythology to build support for their cause can be seen in how nationalists referenced these themes in their work. The first theme encompasses Irish nationalists' references to Celtic ideologies, particularly references to Celtic views of nature and the soul. Some of these views include the ideas of land holding memories, water healing one's soul, and the importance of protecting one's soul.

Several nationalist writings and posters reference these Celtic ideas of nature and soul in order to garner support for their movement by igniting territorialism, turning their audience

against the British by portraying them as mechanical and soulless, and encouraging their audience to draw strength for the fight from the land. In various documents, some authors and artists directly reference Celtic mythological creatures and legends, while others wrote about Celtic society and values. Thus, these two types of references are grouped together in the second theme of references to Ireland's Celtic past and society. Several nationalists reference the lost Celtic society in order to encourage their audience to connect with this source of Irish pride and rebel against the British destruction of their culture. The third theme, encouraging resistance and featuring a call to action, includes references to the Celtic ideas surrounding war and resistance that nationalists invoke to inspire their audience to fight for the nationalist movement. These ideas include the Celtic culture's value placed on not fearing death, the duty to defend one's homeland, as well as the tradition of women warriors. Each of these themes are useful in demonstrating how Celtic mythology influenced the competing narratives of Irish nationalists versus the British leading up to the 1921 Independence.

Discussion

The three main themes I found in various documents each demonstrate how nationalist authors and artists use symbolism from Celtic mythology in varying ways when constructing narratives about themselves, Ireland, and the British. Nationalist authors and artists reference each of these themes to garner support for their movement by connecting their audience to a broader Irish cultural past shaped by Celtic mythology instead of British influence, as well as using those values and stories in Celtic mythology to inspire their audience to support the nationalist movement. Celtic mythology allowed Irish nationalists to shape a sense of Irish pride and inspire resistance against the British. References to Celtic heroes and war gods and goddesses painted the nationalist movement as an honorable and just rebellion that people should join. Additionally, themes from Celtic ideology surrounding soul, nature, strength, and duty all foster an inspirational tone that not only encouraged people to rebel against the British, but also motivated them to rebel fearlessly and vigorously. Nationalist authors and artists used Celtic mythological themes and references to build a favorable and valiant image of themselves, while simultaneously depicting the British as cruel and generating resentment against British rule leading up to the 1921 Independence.

References to Celtic Ideology

There are many references to Celtic ideology regarding the concepts of soul and nature present in nationalist documents. Due to the strong influence of Catholicism in Irish culture and politics, it is important to distinguish what makes these references specific to Celtic mythology, and not just general ideas surrounding nature and the concept of the soul. The Celts had very unique religious beliefs that connected the soul with nature, believing that water and land was an extension of one's soul and held its memories; additionally, in Celtic mythology, the soul is portrayed as an ever-present aspect of a person's life that extends beyond themselves to include their greater surroundings (Adams Media Corporation 2017, 193-197).

Nationalist Pádraic Pearse uses the Celtic concept of the soul and spirituality in his essay *The Murder Machine* to create a sense of cultural pride in his audience and inspire them to support the nationalist movement. In his essay, Pearse argues that the British education system in Ireland has committed terrible crimes against the people because it destroys their souls, a vital part of life since to have a soul is "breathe the breath of life" (Pearse 1914, 9). After describing the vital

importance of soul, Pearse explains that as the British education system destroys the soul, it causes Irish people to deny the spirituality of their nation and the lineage of their blood (Pearse 1914, 9). He portrays the idea that the soul is vital to one's life because it connects people to their greater community, their nation, and their family. This is a very prominent value in Celtic heroic myths, as legends explain that many heroes embarked on quests to protect their people and their souls, because one's soul is bound to others (Adams Media Corporation 2017, 113-124). In his essay, Pearse references this idea of soul connecting communities to foster a sense of comradeship between his audience and unite them to this greater sense of Irish duty and spirituality. Pearse uses the Celtic concept of soul expanding beyond oneself to the community in order to build a sense of Irish pride among his readers.

Another set of references to Celtic ideology I observed center around the Celts' belief that nature connects to the human soul, and thus the natural world was highly valued in Celtic society. Regarding nature, Celtic mythology views various natural elements as sacred, and the power of nature is a recurring theme throughout Celtic myths, legends, and creation stories. Many of the religious practices in Celtic mythology involve nature, and their beliefs were based on the principle of respecting and worshiping the land and nature.

Poet Joseph Mary Plunkett references Celtic ideological themes surrounding the natural world in order to inspire his audience to fight alongside the nationalist movement. In Plunkett's poem *A Wave of the Sea*, the narrator identifies as the sea, and describes how they are one with the foam, wind, and wave (Plunkett 1904-1916). This is a strong Celtic idea as the Celts relied heavily upon nature to sustain their way of life, and nature played a sacred role in Celtic mythology. Specifically, humans were believed to be connected to nature; the earth, plants, and water held people's memories and were a part of their souls (Adams Media Corporation 2017, 194-197). The connection of water to the soul stems from the Celts' belief that bodies of water possess healing properties. As the soul was a vital part of a person's identity and life, many people who experienced grief or a loss of strength would perform healing rituals by bathing themselves in various natural bodies of water such as springs, lakes, and rivers to gain strength (Adams Media Corporation 2017, 194-197). Plunkett uses this Celtic belief of connecting nature to the soul by having the narrator explain that their strength and skills come from the sea, "My gift is the depth of the sea / The strength of the wave / The lightness of foam / The speed of the wind" (Plunkett 1904-1916). In this last stanza, the narrator goes beyond just solidifying the Irish connection to nature and explains that they draw strength and courage from the water. This concept of drawing strength and life from nature, particularly water, is found in many legends throughout Celtic mythology, and Plunkett references it here to inspire his audience to rebel and fight with bravery. By employing this Celtic idea that individuals can draw strength from nature around them, Plunkett inspires his audience to find the willpower and courage to fight alongside the nationalist movement. Previous scholars, such as Martin Williams, studied how nationalist poets utilized mythological tales of heroes to romanticize rebellion (Williams 1983, 314-320). My analysis of Plunkett's work expands William's analysis to include how poets used Celtic mythological themes beyond heroic tales to garner support for the rebellion in poetry.

Many of the religious practices based on Celtic mythology involved nature and followers' beliefs were based on the principles of respecting and worshiping nature. In addition to water, trees held a sacred place in Celtic mythology. The image of the tree of life is prevalent in much Celtic art and legends as they believed that the tree was the ancient ancestor of humankind; they believed that trees connected to all three domains as the roots reached to the sacred streams, the

trunk connected it to the earth, and the branches reached to the sky (Adams Media Corporation 2017, 151). The Celtics valued trees to such a high extent that they even based their language on trees, and the ogham alphabet's letters correspond to different types of trees (Adams Media Corporation 2017, 162-165).

Figure 2

One of the posters from 1916 (Figure 2 in Appendix) references the Celtic mythological view of trees in order to garner support for and justify the armed fighting conducted by the nationalist movement. This illustrates the events of the Easter Rising of 1916, an unsuccessful armed rebellion of Irish volunteer armies against British rule. This poster depicts a woman divinely floating above Irish Volunteer soldiers in the midst of battle, and she is waving the Irish tri-color flag and holding a tree branch in her hand (The Birth of the Irish Republic 1916). The woman flying over the soldiers appears to be holding the tree branch in a blessing sort of motion. The combined divine nature of the woman paired with the tree branch reflects the holy places trees held in Celtic mythology as sacred objects used for guidance. By using a tree branch to "bless" the fighting soldiers and thus referencing the Celtic ideology surrounding trees, this poster justifies the nationalists' armed rebellion. This poster uses the Celtic ideology surrounding the divine nature of trees to portray a divine image of the nationalist movement and vindicate their actions during the Easter Rising.

My analysis of Celtic posters after the Easter Rising expands on many previous mythology scholars' works as they often only analyze written or oral work. For instance, Thuente only explored the importance of Celtic myths in the narratives surrounding the Easter Rising through the analysis of songs and poetry (Thuente 1989, 56-60). My analysis of posters that depict the Easter Rising through the use of Celtic mythology themes adds another layer of depth to Thuente's conclusions that Celtic mythology heavily influenced the narratives that emerged surrounding the Easter Rising. While my research supports Thuente's findings, my analysis differs from hers because it includes an additional type of media.

Another foundational belief about nature in Celtic mythology is the concept that nature connects people to their ancestors. More specifically, the idea that the physical land on which people lived holds the memories and history of its people (Adams Media Corporation 2017, 181-184). This Celtic mythological theme of land holding memories appears in many nationalist writings to garner support for the nationalist movement by igniting a sense of territorialism. For example, poet Thomas MacDonagh references the idea of land holding memories in his poem *The Suicide*. In the third stanza, the narrator describes that as the British bury him, "They will think that they bury well / The damned in their grave of shame" and then goes on to explain that at last this is not the case because the grave, which is imbedded the ground, will hold "The future and the past, / Man's grace and man's disgrace" (MacDonagh 1916). The narrator explains that the British cannot cover up their cruelty by merely burying those they have wrongfully killed, because the grave and the physical land will hold those memories, just as it has always done with Ireland's past. Here, MacDonagh provides inspiration to his reader that their losses and the dead will not be forgotten because the land holds their memories. At the same time, MacDonagh provides his audience with inspiration to fight, to defend Ireland, because it is this physical land that holds their past and their future.

Another example of nationalists referencing the Celtic mythological theme of land holding memories in order to garner support through territorialism appears in Pearse's essay *To the Boys of Ireland*. While trying to convince boys to join the nationalist movement, Pearse explains that the island of Ireland is who they are. Their ancestors made this home, and this land holds the truth of their people; Pearse argues that because the land holds their history, "Ireland belongs to the Irish" (Pearse 1914, 55). Pearse takes this concept of linking nature and rebelling against the British one step further in his essay *The Murder Machine,* where he inspires his audience to rebel against the British education system. In this piece, Pearse describes the British system of education in Ireland as "machinery, a lifeless thing without a soul," (Pearse 1924, 6). He explains that the British education system is unnatural and therefore evil as it destroys one's soul by taking out the breath of life. Later in the essay, Pearse directly references the Celtic education and highlights how it involved spirituality and soul exploration by connecting students to nature (pg. 12-15).

Pearse directly associates the Celtic education with nature and soul building, while categorizing British education by its lifeless and manufactured qualities. He juxtaposes these two forms in the greater context of Celtic mythological themes connecting nature and spirituality to garner support against the British education system. At the same time, he demonstrates to his readers how destructive and cruel the British are towards Ireland's children. Pearse uses the Celtic values of nature and the soul to spark hatred for the British, labeling them as unnatural and soulless, while also building a sense of an Irish past and culture free from British influence by glorifying Celtic education. My analysis of Pearse's *The Murder Machine* pairs interestingly with Martin Williams' study into how nationalist authors used heroic myths to inspire rebellion against the British. Williams concluded that nationalists referenced Celtic mythological tales of heroes in order to dramatize the struggle against the British (Williams 1983, 328). Here, Pearse is essentially doing the same thing, using Celtic mythology to elevate the struggle with the British, but he does so not by using heroic tales, but rather by linking this struggle to the Celtic value of nature— a significantly more foundational belief in Celtic mythology. My findings demonstrate the need to expand the study into Celtic mythology, as it has previously only been examined in a limited scope. By not focusing solely on Celtic heroic myths, I was able to apply

Williams' findings to other Celtic influences and create a more holistic vision of how Celtic mythology shaped Irish nationalism.

References to Ireland's Celtic Past and Society
     In various documents, nationalist authors and artists wrote about Celtic society and values, as well as referencing Celtic mythological legends and creatures in order to build support for their cause. This theme centers on authors directly referencing Celtic past and values that are heavily reflected in Celtic mythology. Before the British invasion, Celtic society dominated much of Ireland's history and played a vital role in shaping their culture. However, under British rule, the Celtic way of life was lost, and their society began shifting as the British imposed their own culture onto the Irish people. Referencing their lost Celtic past became a form of rebellion for nationalists to denounce the British destruction of their culture and create a sense of community amongst their audience.
     William Butler Yeats indirectly references Celtic values in his poem *To Ireland in the Coming Times* in order to justify his form of rebellion within the nationalist movement and inspire others to join. In this piece, Yeats explains that his poetry and other works are a form of rebellion, and that artistic expression has value in war. He begins with "Know, that I would accounted be / True brother of a company / That sang, to sweeten Ireland's wrong, / Ballad and story, rann and song." Here, Yeats proclaims how truly he wants to fight for Ireland's true path through battle cries, stories, and songs. As previously explained, the Celts highly valued poetry as a form of expression, but Yeats takes this a step further to explain how songs are a form of battle. This is another deeply held theme in Celtic mythology as many gods who patronized arts also had a militaristic side to them; for instance, Lugos was god of industry and art, and stories often depict him using craftsmanship to win battles through weapons; Lugos was a warrior and poet (Adams Media Corporation 2017, 45-47). In the last two stanzas of the poem, while still describing his form of poetic rebellion as valiant, Yeats also encourages his audience to take a stand for what is right in the near future. By highlighting how even poetry can be a form of rebellion, Yeats urges his audience to fight against the British in whatever way they can and explains that even artistic disobedience is valuable. By referencing the Celtic value of poetry having power even in war, Yeats inspires his readers to dissent against the British and support the nationalist movement in whatever way they can. In her study, Thuente concludes that in order to fully understand nationalist poetry and songs surrounding the Easter Rising, one must also explore Celtic mythological themes (Thuente 1989, 60). My analysis of how Yeats used the Celtic mythological themes sounding poetry demonstrates the importance of Thuente's conclusion and supports her argument.

Figure 3

Similarly, one of the posters from 1916 references some Celtic values and societal norms in order to justify the nationalist movement and garner support. In this poster (Figure 3), the majority of the space depicts an Irish Volunteer soldier waving the tri-colored flag in front of the General Post Office "GPO" building burning, a scene from the Easter Rising of 1916. But there are also four smaller drawings in each of the corners (clockwise from top left): a red hand, three crowns, three castles, and a ship at sea. It is in each of these corner artworks that Celtic mythological themes can be found (Ireland First and Ireland Last and Ireland Over All 1916). The red hand is a reference to the Red Hand of Ulster, a common symbol that has its roots in Celtic mythology, and more specifically the Ulster Cycle. The legend tells how two chiefs were racing across the water to the newly discovered land and it was agreed that first to lay a hand on the shore would rule over the island. As one boat began to pass the other, and the shore grew nearer, the chief who was beginning to lag cut off his hand and threw it to shore and because he was the first to touch the shore, he won (Moir 1976). This legend is one of the more well-known stories from Celtic mythology and the symbol of the red hand is often found in family crests to symbolize determination and sacrifice. The artist includes the symbol of the red hand in the corner to insight this feeling of sacrifice to highlight the sacrifices other nationalists made during the Easter Rising of 1916. Here, the artist references a Celtic legend in order to inspire their advice to follow in the bravery from that legend and portray the previous losses of the nationalists as courageous.

In addition to references to Celtic society, some nationalist authors and artists directly reference Ireland's Celtic past and their legends. For instance, Yeats directly references the Celtic society in Ireland before the invasion of the British in his poem *To Ireland in the Coming Times* in order to give his audience a sense of Irish cultural history that is free of British influence. In the first stanza, when describing the beauty of the island, Yeats writes "Of her, whose history began / Before God made the angelic clan, / Trails all about the written page." "Angelic clan"

refers to the British, and here Yeats is describing Ireland before the British came, during the time when Celtic society thrived. Yeats writes about this period of Irish history with such an admiring and graceful tone, but in the next few lines his tone shifts to grave, as he describes Ireland's recent state with the British as "a measured quietude." By juxtaposing the alluring reference to Celtic society to the somber description of Ireland under British rule, Yeats conjures a positive image of Irish society free from British influence while simultaneously creating resentment amongst his audience for the current state of Ireland under the British.

Later in his poem, Yeats also directly references Celtic society and mythology in order to create a sense of Irish cultural past free from British influence. Yeats directly names creatures and people from Celtic mythology in the line "Ah, faeries, dancing under the moon, / A Druid land, a Druid tune!" Druids were those who facilitated communication between gods and kings in Celtic society and they were often the ones who passed down as well as guarded mythology (Adams Media Corporation 2017, 81). Faeries, or fairies, were the inhabitants of the Otherworld (the spiritual realm in Celtic mythology) but could pass between the veil that separated the worlds easily and thus interfered in the human world quite often (Matthews and Matthews 2001, 388). They are seen as very strong, powerful creators that can both be a blessing and curse; fairies require the utmost respect from humans, otherwise they would cause misfortunes (Matthews and Matthews 2001, 388-389).

Yeats includes these refuses to Druids and Fairs to bring into his work a part of the Irish past that has been lost and destroyed by British colonialism. By excavating these aspects of Celtic mythology, Yeats is resisting the British corruption of Ireland's past in his work. Here, Yeats directly references Celtic mythology in order to build a sense of Irish cultural pride free from British influence and push back against the anglicization of Ireland's society. Both of these direct references to Celtic mythology and Ireland's Celtic past in Yeast's work demonstrate that Celtic mythology did play a role in nationalist narratives. My analysis counters Bradshaw's claims that scholars should disregard mythological influences by demonstrating how mythological themes were both directly referenced, and subtlety utilized by nationalist authors and artists.

Pearse also directly references Celtic mythology in his essay, *To the Boys of Ireland*, where he tries to recruit new members to the nationalist youth group Na Fianna Eireann. Pearse explains the meaning behind the name of the group and inspires the readers by highlighting the tales of heroism in Celtic mythology (Pearse 1914, 55-57). The Fianna were an elite group of warriors skilled at poetry, art, craftsmanship, and war; their commander, Fionn, was gifted the Fianna for ridding King Cormac's kingdom of murderous fairs, one of his many quests in the Fenian Clue (Adams Media Corporation 2017, 26). In this essay, Pearse directly describes some heroic tales from Celtic mythology in order to inspire boys to fight and join the nationalist movement. My analysis of Pearse's reference to Fianna warriors can be compared to the conclusions Largey reached in his study surrounding heroic folktales in the Haitian revolution. Largey concluded that revolutionaries used heroic myths and other legends from mythologies in order to inspire those heroic characteristics in others within the moment (Largey 2005, 335-337). While Pearse uses this tactic more as a recruitment technique rather than just rallying support within the nationalist party, I found a similar process of "recombinant mythology," as Largey describes it, in his work.

Overall, Celtic society defines Ireland's past and culture before the British invaded and colonized the island. Nationalist authors and artists, both directly and indirectly, referenced Celtic values and myths in their works in order to reclaim their past. Irish nationalists referenced

Celtic mythology in their works in order to create a sense of Irish pride in their audience, inspire rebellion against British rule, and garner support for the nationalist movement.

Encouraging people to fight

Finally, many nationalists referenced Celtic mythological themes surrounding war in their works to encourage resistance. Celtic mythology presents a unique ideology surrounding life, death, wars, and heroes. These themes also include a section about references to the Celtic view of women's roles, particularly the juxtaposition of views of women in nationalist posters. Nationalists often reference these ideas in Celtic mythology and as a call to action for the nationalist movement and encourage people to fight. Nationalists also reference Celtic mythological values specifically to encourage women to join their movement. The political posters reflected Celtic ideas of women and their role in wars.

Figure 1   *Figure 2*

For instance, two of the political posters I analyzed for my visual documents both reflected Celtic ideas of women (Figures 1 and 2) in order to garner support for the nationalist movement from Irish women. Figure 1 depicts a woman as a warrior, ready to fight for Ireland (The World 2021). Figure 2, however, depicts a woman in a much more elegant and divine way (The Birth of the Irish Republic 1916). These differing depictions of women as both fierce warriors and nurturing ladies is interesting because Celtic mythology greatly highlights the dual aspects of women. The most important Celtic goddess Morrigán was the primary patron of war and hunting, a realm often patronized by gods in other mythologies; however, Morrigán was also the goddess of fertility, cattle, and crops, showing her nurturing side (Adams Media Corporation 2017, 33-35). In Figure 1, the artist references the Celtic idea of women warriors in order to inspire strength among Irish women and portray the idea that they too could join the nationalist

movement and fight against the British. She stands in stark contrast to the beaten-down, English-dominated "West Britain" figure to the right of the poster. Figure 2, on the other hand, depicts the nurturing and divine aspect of women blessing the soldiers in order to encourage women to support the movement even if they do not fight directly. In both posters, nationalist artists reference the dual aspect of women in Celtic mythology in order to both inspire women to fight and garner women's support for the nationalist movement.

Additionally, both posters depict women as embodying Ireland and as a representation of Ireland's sovereignty. The idea of women representing sovereignty can be seen in the stories of Cailleach, the veiled goddess of sovereignty who is also strongly associated with rivers (Adams Media Corporation 2017, 37-39). Here, the choice to depict the country through a woman reflects the vital life-giving role women played in Celtic mythology and their responsibility to protect the sovereignty of the land. These references to the Celtic mythological theme of women representing sovereignty are intended to entice women to protect their home from the British.

Nationalist authors also reference Celtic views of women in written works to amass support from Irish women. For instance, George William Russell emphasizes the strength women provide in holding up men in this world in *The Hero in Man,* an article meant to inspire every-day Irishman to be heroic for the nationalist cause. When describing the importance of mothers in holding up communities, Russell writes "Here I may say that the love of the Mother, which, acting through the burnished will of the hero, is wrought to highest uses, is in reality everywhere, and pervades with profoundest tenderness the homeliest circumstance of daily life" (Russell 1910). Russell explains that the support and life women provide not only sustains communities but also inspires heroes to fight. This idea of women holding up society and heroes is very prominent in Celtic mythology. Despite not explicitly referring Celtic mythology, Russell does promote its core views of women. Here, Russell employs this mythological theme as a way to inspire women to support the nationalist movement and assure them that their role in society is valued in Irish culture.

Nationalist authors and artists also encouraged the general public and men to rebel by referencing Celtic mythology. One common Celtic mythological theme that Irish nationalist authors and artists used to inspire rebellion centered around the Celt's view of life and death. The Celts viewed death not as the end to life but rather the continuation of life in the spiritual realm (Adams Media Corporation 2017, 12). Many nationalists used this Celtic ideological view to inspire their audiences to fight and rebel relentlessly, without fearing death. This can be seen in Figure 2, the Irish nationalist poster with a woman divinely floating above an Irish volunteer soldier in battle. This juxtaposition of the graceful, motherly side of women in the middle of war depicts a common Celtic theme regarding the linkage of life and death (The Birth of the Irish Republic 1916). Here, the depiction of a divine woman over a battlefield, seemingly blessing the soldiers, is meant to inspire others to join the nationalist fight because it counters the fear of death and references the Celtic ideology surrounding the connection between life and death.

Similarly, in his poem *To Ireland in the Coming Times*, Yeats discusses death as merely a continuation of life, not the end of it or something that people should fear (Yeats 1913). The Celtic mythological theme of reincarnation and the absence of the fear of death influenced how the nationalists viewed their fight against the British. This inspired them to fight and use violence despite the potential to get killed or harmed.

Likewise, Russell encourages people to join the nationalists fight by referencing Celtic myths of heroes and the duty to avenge the fallen. In order to convince his audience that the nationalist

cause is valiant, Russel begins his essay by explaining that "[w]e feel such deep pity for the fallen that there must needs be a justice in it, for these diviner feelings are wise in themselves and do not vaguely arise" (Russell 1910). He highlights a common Celtic value of avenging your brothers who have died and fighting honorably to protect your home (Adams Media Corporation 2017, 113). By calling on the Celtic moral duty to avenge the fallen, Russel encourages others to join the fight while also justifying their rebellion as heroic and noble.

Pearse takes a similar approach in his essay *To the Boys of Ireland,* as he encourages his audience to join the Irish nationalists fight against the British by referencing Celtic mythology. Pearse discusses the great Celtic myths in which boys have become heroes to save their home. He writes "[w]hen the boys of Ireland kept the foreign invaders in check on the shores of Ventry until Fionn had rallied the Fianna: it may be that a similar tale shall be told of us" (Pearse 1914, 55). By referencing the heroes from Celtic mythology and then announcing that the young boys in his audience could be like those heroes, Pearse is using Celtic mythology to encourage boys to join and fight with the nationalist movement.

Conclusion

My research centers around three themes: references to the Celtic ideology surrounding nature and soul, references to Celtic societal values and norms, and the inclusion of Celtic myths in order to encourage people to fight. Each of these themes, demonstrated in nationalist essays, posters, and poems, shows that nationalist references to Celtic mythology served two main functions in their works. First, nationalist authors and artists reference Celtic mythology in order to garner support for their movement by inspiring people to rebel and justifying their actions against British rule. Secondly, nationalist authors used Celtic mythology in their works in order to connect their audience to a greater sense of Irish culture and pride that is free from British influence. Celtic mythology allowed Irish nationalists to build a sense of Irish pride and inspire resistance while simultaneously depicting the British as cruel and encouraging others to fight. In the lead up to the 1921 Independence, Irish nationalists depicted several different narratives of themselves, the Irish people, and the British. In constructing each of these competing narratives, Celtic mythological themes and legends served as a tool for nationalists to implore in their propaganda. Celtic mythology influenced Irish nationalists' narratives by serving as a powerful way for authors and artists to connect with the Irish people and build support for their movement.

My research bridges a largely understudied part of Ireland's past, Celtic mythology, with an important role defining Irish political history and the Irish nationalist movement. By linking Celtic mythology, a past many Irish people have lost their connection to, with the Irish nationalist movement, a core part of Irish identity today, my research allows people to rediscover part of their identity and reclaim the role of the Celtic mythology in Irish history. My findings demonstrate how understanding Celtic mythology and folklore can provide more in-depth scholarship and analysis of Irish nationalism, a key-stone feature of Irish politics. When studying Irish nationalism, most scholars do not even consider Celtic mythology as influential, and those scholars that do address Celtic mythology often dismiss it as academically unrespectable. When scholars do research Celtic mythology, they often do so in a limited capacity, just looking at it historically or only looking at certain myths. By taking a holistic analysis of Celtic mythological themes, including hero tales, creation legends, gods and goddesses, and their values, my research

brings to light some of Ireland's overlooked past and adds another academic work to the study of mythology to demonstrate that it is a respected field.

For future study into Irish nationalism, scholars could take this research approach and apply it to different periods of nationalism throughout Irish history to see how the influence of Celtic mythology changed over time. Additionally, further studying of the role Celtic mythology played in shaping modern Irish nationalism could lead scholars to examine the extent to which Celtic mythology's influence is still present today. My own research had limitations due to time and lack of access to some resources; future research could explore the conclusions reached here with reference to different types of documents (newspapers, performances, speeches, etc.). On a more global scale, future researchers could apply these findings to different nationalist movements and examine if and how local mythologies influenced those movements. This study into Celtic mythology's influence on Irish nationalism can be further researched in many different ways because Celtic mythology is an extremely under-researched field despite its rich and complex history.

Appendix

Figure 1: This poster depicts Éire (Ireland) on the left side with a woman carrying a spear dressed in nice robes while holding ships' reins. On the right side of the poster, under the label of "West Britain," sits a woman wearing rags and the Union Jack in Northern Ireland. In between the two images the poster reads "Seaċtṁain na Gaeḋilge" which refers to a local Gaelic festival, and at the bottom says "ON WHICH SIDE ARE YOU? LANGUAGE COLLECTION NOW ON" (The World 2021). This poster was published in 1913, during which period there was a slight revival in Celtic culture and Gaelic language. At this time, many Irish began reconnecting with their Celtic history as a source of Irish pride and rebellion against the British domination of their cultural history. Gaelic festivals were a common place for people to learn and practice Gaelic, and they often had a nationalist crowd as a sign of protest to British rule.

Figure 2: This poster from 1916 depicts soldiers wearing Irish Volunteer uniforms in the midst of battle with a woman floating above them carrying a tree branch and the Irish tri-color flag. This poster depicts the events of the Easter Rising of 1916, an unsuccessful armed rebellion of Irish volunteer armies against British rule. Though this days-long siege was generally deemed unsuccessful because its leaders were captured and executed, the treatment of rebels by British soldiers did help garner sympathy and support for Irish independence. This is one example of many posters and works done to commemorate the Easter rising and help garner support for the nationalist movement after the event.

Figure 3: This poster from late 1916 depicts an Irish Volunteer soldier waving the tri-colored flag in front of the GPO (General Post Office) building burning. While the majority of the space in this poster focuses on that main depiction of an Irish Volunteer soldier, there are also 4 smaller drawings in each of the corners (clockwise from top left): a red hand, three crowns, three castles, and a ship at sea. These corner images depict the ancient four provinces of Ireland, with Ulster represented by the Red Hand of Ulster, drawn from the mythological Ulster Cycle. This poster serves as another example of many posters and works done to commemorate the Easter rising and help garner support for the nationalist movement.

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PARENTAL VALUES AS PREDICTORS FOR PRESIDENTIAL VOTE CHOICE

Adam Billen and Chris Berning

Abstract

As American politics have become increasingly contentious in recent years, many have sought to better understand the root of ideological and partisan differences in the United States. One potential lens for analyzing political differences is by looking at politics in relation to the family structure. Both psychologists and political scientists alike have drawn comparisons between how one believes family and childrearing ought to be organized and their ideological beliefs, and have found evidence establishing a connection between them. However, as of yet, there is no direct evidence as to whether or not these beliefs, referred to here as parental values, have an impact on vote choice. As such, the research question of this paper asks whether or not an individual's parental values affect their vote choice in US Presidential Elections. A multiple regression analysis was used to test this question. The independent variables are a set of three binary questions from the American National Election Study (ANES) asking respondents to choose which of two traits, such as independence or respect for elders, they would rather their children exhibit. A number of controls related to demographics, political beliefs, and authoritarianism are included. The dependent variable is the presidential vote choice question from ANES. Responses from the past five presidential elections were observed, ultimately finding a significant correlation between parental values responses and presidential vote choice.

Keywords: Parental values; polarization; ideological constraint; culture war; authoritarianism; family-based morality; elections; vote choice.

Introduction

     As the culture wars have waged on in recent years, political scientists, commentators, and observers of all types have discussed increasing polarization and partisanship in American politics (Desilver). In the last thirty years the discussion has shifted from whether polarization is increasing in America to how we can slow its rapid intensification. Barack Obama's historic presidency became defined by gridlock and partisan fighting (Weaver 2010). Public approval for congress dropped to historic lows (Gallup 2022), the new and extreme Tea Party wing of the Republican party materialized (Abramowitz 2012), and Obama ended his presidency as the most polarized president since Dwight D. Eisenhower (Tyson 2020). The next president, Donald Trump, further fanned the flames of polarization. Politics under Trump became increasingly divisive on a personal level. More Americans than ever said they would refuse to date someone of the opposing political party, that they did not share basic political facts with the opposing party, and that they had stopped talking to someone as a result of a political conversation (Dimock and Gramlich 2021). In one of the most dramatic moments in American political history, Trump denied the results of the 2020 presidential election and stoked a full-scale insurrection against his own government (Cohen 2021). After focusing on bipartisanship in his presidential campaign, President Joe Biden has been faced with inter- and intra-party fighting, slowing down his legislative agenda even as his own party controls all three chambers of government (Berman 2022).

     As polarization has accelerated, political scientists have been forced to reconceptualize their understanding of why different people can have such drastically different perceptions of and approaches to politics. Some political scientists have argued that beliefs around how children should be raised and the structure of the family help to explain these differences. Both psychologists and political scientists have found evidence that supports this connection between views of parental values and ideology. There is not, however, a body of research making a direct link between parental values and vote choice. Accordingly, the research question of this paper asks whether or not an individual's parental values affect their vote choice in US Presidential Elections. Parental values are measured using a set of questions from the American National Election Studies (ANES). The independent variable is an index of three of these questions going back to the year 2004. These questions ask respondents if it is more important for a child to be considerate or well-behaved, if it is more important for them to have curiosity or good manners, and if it is more important for them to have independence or respect for elders. These questions have been used to measure Lakoff's theory throughout the existing literature (Barker and Tinnick, 2006 253).

     For the dependent variable, this study uses a question from ANES that asks which candidate respondents intend to vote for in the upcoming presidential election. Included controls relate to demographics, political beliefs, and authoritarianism. The multivariate regression utilizing these variables resulted in a positive coefficient with a statistically significant p-value, indicating that parental values are a meaningful predictor of presidential vote choice.

     While much research has been done regarding the connection between ideology and vote choice and between parental values and ideology, the exact connection between parental values and vote choice has not been thoroughly explored. In this paper, the way parental values affect vote choice in US Presidential Elections going back to 2004 is directly examined. The year

2004 is chosen as a result of differences in the wording of questions and the availability of certain questions before 2004 in the ANES. Hopefully this will bridge the gap between the relationship concerning parental values and ideology and the relationship between ideology, partisanship, and vote choice.

Literature Review

Cultural Divide, Polarization, and Their Connections to Politics

To understand why Americans are polarized, we must first examine how polarized Americans are. Since the 1990s, popular discussion of "political polarization" has generally centered on affective cultural issues, often described as "the culture war" (Fiorina 2004, 1-2). This term is best explained by James Hunter, who argues that the culture war can be viewed as a type of "cultural conflict," which he defines as "political and social hostility rooted in different systems of moral understanding." What distinguishes culture war is that conflicts are based on fundamentally different beliefs regarding moral authority. In other words, in culture wars, people not only come to different moral conclusions, but are rather operating on different moral premises (Hunter 1991, 42-43). After dropping out of the 1992 Presidential election to endorse George H.W. Bush, Pat Buchanan explicitly invoked this term in his speech at the 1992 Republican National Convention. Fiorina described the speech's rhetoric as part of a larger focus on "family values" in the Republican party at the time (Fiorina 2004, 1-2). The phrase then caught fire in the media, as Fiorina notes in his description of the electoral maps blasted on television in the 2000 election (Fiorina 2004, 4). Fiorina, however, contended American polarization was being blown out of proportion by the media, as there was significant overlap between the two parties on many policy positions, which would suggest that they were not truly polar opposites (Fiorina 2004, 7-8).

Unfortunately, as time has gone on, Fiorina's argument has been dismantled by a continued rise in polarization in America. Boxell finds that America is uniquely extreme in its polarization compared to other countries, as between 1978 and 2020 the average partisan has increased their rating of in-party as opposed to out-party members by 28.9 points (Boxell 2022, 2). This represents an average increase of 5.6 points per decade, the highest of the countries reviewed (Boxell 2022, 7). This means that Americans became more approving of their own party and less approving of the opposing party. Dimock presents similar results, finding that the United States has the largest gap between parties in support of the government's response to the coronavirus outbreak, at 47 percent, compared to a host of other countries (Dimock & Wike, 2021). These results demonstrate a much greater level of distaste for the opposition and disagreement around prominent political issues in the US compared to other countries.

Over time, these ideological differences around cultural issues have begun to have a more significant effect on what parties people vote for, as the Democratic and Republican parties have become more ideologically rigid. Bafumi and Shapiro examined the relationship between ideology and partisanship and observed that Americans historically aligned personally with a party rather than along ideological lines. As a result, while parties had their own platform, there were plenty of ideological liberals and conservatives to be found in each party. However, since the Reagan era partisan realignment, the parties have become far more "ideologically coherent," as evidenced by shrinking numbers of weak partisans and "true independents," and growing

levels of partisan leaning independents and strong partisans (Bafumi and Shapiro 2009, 4-5). Because of this shift, the nature of partisanship itself has become more ideological rather than based on personally identifying with a given party. Consequently, Bafumi and Shapiro conclude that because parties and voters are more ideologically sorted and because partisan identification is a very strong predictor of vote choice, ideology itself is a greater predictor of vote choice than in previous eras (Bafumi and Shapiro 2009, 9).

Sources of Ideology

Considering the fact that ideological beliefs are an increasingly important factor in how Americans vote, it is worth examining what factors shape people's ideology. This study identifies two main explanations. The first theory argues that authoritarianism explains ideological variance among the population (Stenner 2005). Conversely, other researchers have argued that one's ideological positions are better explained by the way we view parental values and the family structure (Lakoff 1996). In this section, the backgrounds and supporting evidence for both theories will be examined and this study's focus on the parental values hypothesis will be explained.

Authoritarianism and Ideology

For decades, political scientists and psychologists alike have researched what it means to be an authoritarian and how that shapes one's view of the world. Karen Stenner's research has been particularly influential to understanding these questions. Stenner argues that "environmental conditions of normative threat," whether real or perceived, and individual pre-existing psychological dispositions combine to create authoritarianism (Stenner 2005, 325). Generally, the "authoritarian" disposition is characterized by its preference for obedience and conformity rather than freedom and difference. In terms of ideologies, this authoritarian disposition tends to manifest as social conservatism (Stenner 2009, 124). That said, authoritarianism should not be understood as a political ideology itself, but rather a mindset and way of thinking. The attitude and behaviors of authoritarianism are "highly susceptible to political influences: they have important political causes, as well as important political consequences" (Stenner 2005, 326). For instance, research has shown that following the 9/11 terrorist attacks, many Americans perceived themselves to be at much greater threat from terrorism than before the attacks. Consequently, many Americans who were generally non authoritarian by disposition showed significant increases in support for authoritarian policies (Hetherington and Suhay 2011, 557).

Hethrington and Weiler build upon Stenner's findings by explaining how the authoritarian mindset drives political polarization. They argue that certain political issues can be interpreted as challenging the current way of life in America, and in turn, Americans' worldviews. As a result, Hetherington and Weiler found that authoritarianism was significantly correlated with one's opinion on political issues that could challenge the American political and cultural status quo (Hetherington and Weiler 2009, 9).

Importantly, Hetherington and Weiler also argue that people can be increasingly polarized if issues cut more clearly across the authoritarian vs. non-authoritarian divide. One of the main reasons why scholars like Fiorina believed that Americans were not as polarized as previously thought was the fact that on an issue-by-issue basis, the opinions of each party are not

particularly far apart (Fiorina 2004, 7-8). Though it has become clear over the years that America has certainly become more bitterly polarized, there is still a lingering question of how this is possible if opinions have not actually shifted towards the poles. Hetherington and Weiler explain this phenomenon by saying that issues like gay rights, terrorism, and war, which are clearly divided along authoritarian vs. non-authoritarian lines, have a unique nature to drive polarization. This is because opinions on such issues are more directly sorted based on an individuals' fundamental view of the world, which means that a small difference of opinion may be perceived as a much larger disagreement. In the past few decades, issues of this nature have become much more prominent in political discourse, which has resulted in greater polarization (Hetherington and Weiler 2009, 32).

Parental Values and Ideology

A second potential explanation for political ideology is that the core of one's political beliefs is closely related to questions about parental values and family structure. Lakoff provides the basis of this argument. He argues that the only way to effectively compare conservative and liberal policy positions is through the lens of "family-based morality" (Lakoff 1996, 385). The theory supposes that individuals view the relationship between government and its citizens as that of a parent and their children, with some believing that the family must be led by a "nurturant parent" and others a "strict father." In this dichotomy, the "nurturant parent" model is matched to liberals and the "strict-father" model is matched to conservatives. Those ascribing to the strict-father mentality believe in punishment and rule-setting as a method to instill discipline and independence. Those ascribing to the nurturant-parent model believe that support and protection are necessary to give a child the tools and space they need to become disciplined and responsible (Lakoff 1996, 155-156).

Lakoff's theory sparked a wave of empirical research seeking to identify if there is a true association between these models and individuals' political ideologies and partisan alignments. Feinberg found statistically significant evidence that the strict-father and nurturant-parent models accurately predicted and explained "individual differences in political attitude" (Feinberg 2020, 792). Feinberg also found that those who subscribe to both the nurturant-parent and strict-father models are susceptible to well-framed arguments using either lens (Feinberg 2020, 781). Additionally, Feinberg identified that these arguments were specifically salient for these individuals in comparison to amoral arguments using statistics related to political candidates (Feinberg 2020, 796). Those subscribing to neither of the two models were unconvinced by arguments from either model, and those strictly adhering to one of the two models were unconvinced by arguments from the other model.

Further confirmation for Lakoff's view of parental authority and its effect on ideology came from McAdams et al. The researchers interviewed 128 practicing Christians of various denominations in Chicago. During the interviews, participants reported their ideological views, and recounted 12 "scenes" from their life which fell into different categories such as "a high point," "a low point," "a positive childhood scene," and "a negative childhood scene" among others (McAdams et al. 2008, 980-981). These interviews were analyzed to see if the scenes described contained certain themes that aligned with Lakoff's strict-father or nurturant-parent models (McAdams et al. 2008, 980). Ultimately, McAdams et al. found that strict-father themes were significantly correlated with political conservatism, and that liberals

were more likely to take certain nurturant-parent themes from life experiences than conservatives (McAdams et al., 2008, 984). Overall, this study offered a unique perspective on the issue that provides additional evidence in support of a connection between parental values and ideology.

Along with Feinburg and McAdams's analyses of Lakoff's theory from a psychological perspective, political scientists have also tested the parental values theory of ideology. Notably, Barker and Tinnick put Lakoff's thesis to the test. In their paper, Barker and Tinnick compared the ANES parental values responses to ANES responses regarding ten key political issues: Abortion, Gay Rights, Taxation, Welfare/Poverty Policy, Military/Defense, Gun Control/Crime, Environmental Policy, Affirmative Action, Immigration, and Foreign Aid. Even after controlling for multiple potentially confounding variables, Barker and Tinnick were "impressed" by the degree to which responses on issues of parental values consistently predicted opinions in the other issue domains (Barker and Tinnick 2006, 254). Further, those with more consistent "strict father" or "nurturant-parent" responses to the parental values questions tended to have more consistently liberal or conservative responses to the ideological questions (Barker and Tinnick 2006, 257). These results help to confirm that views on parental values may not only shape political views but that they could drive ideological constraint and polarization.

Critically, Barker and Tinnick also directly challenged the authoritarian hypothesis. In their study, they controlled for authoritarianism as described by Stenner, as well as Hetherington and Weiler with a variety of variables from the ANES data, including "Moral Absolutism," "Christian Fundamentalism," and "Racism." (Barker and Tinnick 2006, 261). Even after these controls were taken into account, the questions aimed at measuring Lakoff's theories of parental values and political ideology were still significant predictors. This suggests that even if authoritarianism is an important cause of political ideology and polarization, parental values are still a significant piece of the puzzle worth examination (Barker and Tinnick 2006, 254).

Methodology

This study uses a multiple regression analysis with intended presidential vote choice as the dependent variable, the ANES parental values questions as independent variables, and 17 control variables to adjust for other possible influences on vote choice. This makes clear whether the parental values responses have a significant relationship with vote choice and to what extent each question may affect that relationship. The following equation is used:

Intended Vote Choice= α + β1Lakoff Index (Curiosity or Good Manners, Considerate or Well Behaved, Independence or Respect for Elders)1 +β2 Party ID2 + β3Liberal-Conservative Scale3 + β4 Gender4 + β5Race (4 category)5 + β6Education6 + β7Age7 + β8Income Group (percentile)8 + β9Region9 + β10Political South/North10 + β11Religion (major group)11 + β12Religious attendance12 + β13Who is the Chief justice?13 + β14Who is the VP?14 + β15Who is the Speaker of the House?15 + β16 Moral Absolutism16 + β17Christian Fundamentalism18 + β19Racism (Are Black People Hard Working or Lazy?)19 ε

The dependent variable will be measured by "Intended Vote Choice" using the questions

from ANES that asked participants who they planned to vote for in the coming election. In 2004 and 2008, this question was phrased as "Who do you think you will vote for in the election for President?" and "If you were going to vote, who do you think you would vote for in the election for President?" Starting in 2012, the question was rephrased to read "Who do you think you will vote for?" Presidential vote choice is coded as Democratic and Republican candidates. Including third party candidates would be preferable, but because ANES measures this question with specific candidates rather than parties, the third-party candidates spanned too broad a range of ideologies to be useful in this study's analysis.

Three independent variables are used in the study, originating from the four parental values questions from ANES. Those questions read "Please tell me which one you think is more important for a child to have: curiosity or good manners?", "Please tell me which one you think is more important for a child to have: being considerate or being well behaved?", and "Please tell me which one you think is more important for a child to have: independence or respect for elders?". One question, "Please tell me which one you think is more important for a child to have: obedience or self-reliance?", was excluded as both Obedience and Self-Reliance are values that fit within the strict-father model as presented by Lakoff (Barker and Tinnick 2006, 253). 17 controls are included in the regression because the dependent variable is vote choice, something that can be affected by a large number of factors. Basic demographic controls for gender, age, race, education, religion, region, income, and religious attendance are included. A seven-point scale going from strong Democrat to strong Republican is included to control for party identification. Given that the dependent variable is presidential vote choice and party identification can be expected to strongly predict this choice, it is important that it is controlled for. A seven point scale ranging from extremely liberal to extremely conservative is included to control for ideology, a measure important to the existing literature on the topic of this study. Questions are included relating to Moral Absolutism, Moral Fundamentalism, and Racism as controls for Authoritarianism, another measure important to the existing literature on this topic. Moral absolutism refers to the extent to which people are willing to change their view of moral behavior to adjust to the times, Christian fundamentalism examines to what extent people believe the Bible is the word of God or merely written by men, and racism examines people's stated opinions about racial minorities. These were selected based on the methods used by Barker and Tinnick to control for authoritarianism in their research (Barker and Tinnick 2006, 254). To control for the different political environments across different elections, the years 2004, 2008, 2012, 2016, and 2020 are included as dummy variables. Finally, a bundle of questions testing respondents' knowledge of who the current Vice President, Speaker of the House, and Chief Justice are is used to control for respondents' level of political knowledge.

The null and alternative hypotheses reflect the primary research question of this study. The null hypothesis is that there is no relationship between responses to ANES parental values questions and responses to the ANES candidate preference questions (H0 = 0). The alternative hypothesis is that there is a strong relationship between the ANES parental values responses and ANES candidate preference responses (Ha ≠ 0). If the results of the multiple-regressions showed that those whose answers fell more in line with either the "strict-father" or "nurturant parent" side of the parental values spectrum were not more likely to prefer one party over the other, the null hypothesis would not be rejected. If the results showed that those whose answers were more aligned with the "strict-father" or "nurturant parent" view of parental values were more likely to prefer one party over the other, then the null hypothesis would be

rejected. The data will be taken from ANES and will span from 2004 through 2020. Figure 1 below lists the variable codes in the   cumulative ANES dataset for each variable. Figures 2 through 4 are bar plots showing the distribution of the three predictors across all years.

Figure 1: Variables and their corresponding ANES codes

Code	Variable
VCF9246	Curiosity or good manners (predictor, Lakoff index)
VCF9248	Considerate or well behaved (predictor, Lakoff index)
VCF9249	Independence or respect for elders (predictor, Lakoff index)
VCF0713	Intended vote choice (dependent variable)
VCF0301	Party Identification (control)
VCF0803	Liberal-Conservative Scale (control)
VCF0104	Gender (control)
VCF0105b	Race (4 category) (control)
VCF0110	Education (control)
VCF0102	Age (by group) (control)
VCF0114	Region (control)
VCF0113	Political South/North (control)
VCF0128	Religion major group (control)
VCF0130a	Religious attendance (control)
VCF9262	Who is the Chief justice? (control)
VCF9261	Who is VP? (control)
VCF9260	Who is the Speaker of House? (control)
VCF0852	Moral Absolutism (control)
VCF0850	Christian Fundamentalism (control)
VCF9271	Racism (control)

Figure 2: Curiosity or Good Manners, Figure 3: Considerate or Well Behaved, Figure 4: Independent or Respect for Elders
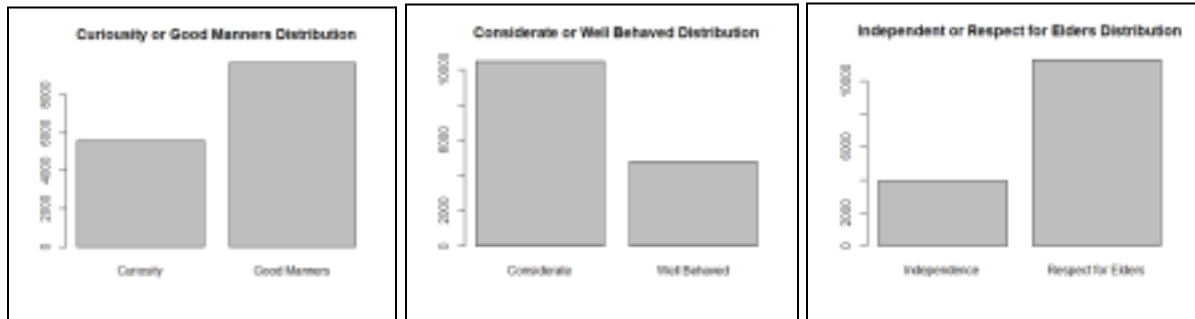
Study Design

The data for this study was sourced from ANES. Specifically, the cumulative file going back to 1948 was subsetted to include only the last five presidential elections, 2004 to 2020, and the variables examined in this paper. Responses unusable for the study were removed from the data. Under this process, all missing data, "don't know," "not sure," "undecided," and other non-conclusive answers were removed. This was done using the "subset" function to remove all

values coded into the data as less than 0, and in the case of the parental values questions, all answers that were not equal to the binary "1" or "3" responses. We felt confident in removing this amount of data because of the sample sizes for the years the study used: 1,212 for 2004, 2,322 for 2008, 5,914 for 2012, 4,270 for 2016, and 8,280 for 2020. This culled data set is called "rmAllData".

Within rmAllData, the dependent variable, intended vote choice (*VCF0713*), was subsetted into "1" for Democratic candidates and "2" for Republican candidates. Each of the predictors, curiosity or good manners (*VCF9246)*, considerate or well-behaved (*VCF9248*), and independent or respect for elders (*VCF9249*) were each subsetted into their strict binary responses "1" and "3."

Because the dependent variable, independent variables, and controls were all categorical, each variable was hand-coded in the data set as a dummy variable. The subsetting of the variables into only the responses relevant to the study means that non-conclusive responses will not be included. Without doing this, any unique response type would have been bunched in with the default for that dummy variable.

For the dependent variable, intended presidential vote choice, 1 is coded to Democratic and 0 is coded to Republican. For the predictors, curiosity is coded to 1 and good manners to 0, considerate to 1 and well behaved to 0, and independent to 1 and respect for elders to 0. This is done so that the answers considered more liberal in the existing literature are coded to 1 and those considered more conservative are coded to 0 in line with how predicted vote choice was coded. These dummy variables were then used as the dependent variable, independent variables, and controls to run the regression.

Results

Our regression model resulted in a coefficient of 0.022 for the Lakoff index. Multiplying by three to account for the three variables results in a coefficient of .066. This means that even when controlling for common predictors of voting behavior such as party identification, ideology, demographic information, and authoritarianism, if you answered all three questions consistent with the nurturant-parent model, you would be 6.6% more likely to vote Democratic. These results are statistically significant at the 0.001 level. A 6.6% swing is important considering elections have been won on much smaller margins. Our results fill the gap in the existing literature by establishing a direct connection between parental values and vote choice. Previous research has only indirectly linked the two based on the effect of parental values on ideology and of ideology on vote choice. The full regression summary and coefficient plot for the model can be seen in the Appendix as Figures 6 and 7.

Controls:

The results of the controls for Party Identification and Ideology are important given their direct connection to the existing literature measuring Lakoff in relation to ideology. For Party Identification, strong Democrats, weak Democrats, and independent Democrats all have positive coefficients significant at the .001 level. Strong Republicans, weak Republicans, and independent Republicans all have negative coefficients significant at the .001 level. This makes sense as this indicates that Democrats vote more democratic than moderates, and Republicans vote more republican than moderates. For ideology, extreme liberals, liberals, and slight liberals

have positive coefficients significant at the .001 level. Extreme conservatives, conservatives, and slight conservatives have positive coefficients significant at the .001 level. This makes sense, as the Democratic party is generally more liberal, and the Republican party is generally more conservative.

Conclusions

In light of these results, the null hypothesis that parental values have no impact on predicted vote choice can be rejected. The 95% confidence intervals for the independent variables and controls can be seen in Figure 6. The R^2 for this model is .5985 and the adjusted R^2 for this model is 0.5971, which would suggest that the model did a reasonably good job of capturing the variance in presidential vote choice.

These findings are consistent with the existing literature regarding parental values, ideology, and presidential vote choice. This study argues in favor of Lakoff's (1996) hypothesis that people's political ideologies can be organized by their views of parental authority. In his view, people who align more with the "strict-father" parenting type tend to be more conservative, whereas those who align with the "nurturing parent" type tend to be more liberal. Further, as Bafumi and Shapiro (2009) explained, American political parties have become increasingly ideologically consistent since the 1980s. This, in turn, has made ideology a more important predictor of party identification, which is the biggest factor in determining who someone will vote for. The fact that the index of the three parental values questions this study examined are significant predictors of presidential vote choice in the model supports both the connection between parental values and ideology identified by Lakoff (1996), Barker and Tinnick (2006), and Hetherignton and Weiler (2009), as well as the connection between ideology and vote choice identified by Bafumi and Shapiro (2009).

One of the main limitations of this study is the fact that separate regressions were not run for each year. While the study did control for the effects of each election year, this on its own does not allow us to examine how the relationships between family values, ideology, and vote choice have changed over time. Further research on the connection between parental values and presidential vote choice could examine how the relationship has changed year over year. Bafumi and Shapiro argue that ideology has become an increasingly important factor in people's party identification and presidential vote choice (Bafumi and Shapiro 2009, 9). If this is the case, then the effect should become more significant in more recent elections.

Additionally, this research is limited because it does not look into the non-conclusive responses to family values questions or people who did not intend to vote for the Democratic or Republican nominee. Future research could examine how answering inconclusively on the parental values questions ("both," "neither," "I don't know," etc.) affects the strength of partisanship or ideological constraint. Barker and Tinnick examined the connection between answers on the questions and ideological constraint, however, the options for certain inconclusive answers are only offered online and in more recent versions of the ANES surveys (Barker and Tinnick 2006, 1). If the connection between one's view of parental authority is truly predictive of ideology, then those who are less consistent on issues of parental authority may, in theory, be less consistent partisans or less constrained ideologically. In the same vein, researchers may also want to examine the connection between conclusive and inconclusive responses to the parental values questions and support for third party candidates.

Knowing that the American public's value systems around the family directly influence their vote choice can help us to understand the intense polarization that has consumed American political life. The American public is not just divided as a result of coming to different conclusions on policy issues. Rather, the lenses through which they view the political landscape are fundamentally different. To fully grasp the nature of political polarization, Americans need not only understand why their fellow citizens hold opposing views, but also exactly how they are thinking about and approaching the political world. Based on the results of our study, parental values represent one important lens used by people when interpreting politics.

Appendix

Figure 6. Regression Summary

-	Est.	S.E.	t val.	p
(Intercept)	0.13	0.03	4.23	0.00
LakoffIndex	0.02	0.00	6.91	0.00
year2008	0.03	0.02	1.93	0.05
year2012	0.05	0.01	3.91	0.00
year2016	-0.00	0.01	-0.29	0.77
year2020	0.05	0.01	3.64	0.00
Male	-0.01	0.01	-2.15	0.03
Black_NonHispanic	0.18	0.01	18.66	0.00
Hispanic	0.07	0.01	7.93	0.00
Other_Race	0.04	0.01	3.50	0.00
HighSchool	0.07	0.02	4.20	0.00
Some_College	0.07	0.02	4.48	0.00
College_Or_More	0.11	0.02	6.67	0.00
Age_25_34	-0.03	0.01	-2.41	0.02
Age_35_44	-0.02	0.01	-1.41	0.16
Age_45_54	0.00	0.01	0.08	0.94
Age_55_64	0.00	0.01	0.02	0.98
Age_65_74	0.01	0.01	0.48	0.63
Age_75_99	0.04	0.01	2.52	0.01
Income_17_33	0.03	0.01	2.72	0.01
Income_34_67	0.03	0.01	3.62	0.00
Income_68_95	0.04	0.01	3.94	0.00
Income_96_100	0.03	0.01	1.92	0.06
Region_North_Central	-0.01	0.01	-0.72	0.47
Region_South	-0.02	0.01	-1.49	0.14
Region_West	0.00	0.01	0.57	0.57
Region_Non_South	0.00	0.01	0.22	0.83
Religion_Catholic	0.01	0.01	1.58	0.11
Religion_Jewish	-0.02	0.02	-0.87	0.38
Religion_Other	-0.01	0.01	-1.55	0.12
Church_Attendance_Weekly	0.01	0.01	1.04	0.30
Church_Almost_Weekly	0.01	0.01	0.64	0.52

Church_Once_Or_Twice_Month	0.01	0.01	0.84	0.40
Church_Few_Times_Each_Year	0.01	0.01	0.67	0.50
Church_Never	-0.00	0.01	-0.29	0.77
Correct_Identify_CJ	0.02	0.01	2.56	0.01
Correct_Identify_SoH	0.02	0.01	2.79	0.01
Correct_Identify_VP	-0.00	0.01	-0.10	0.92
Party_Strong_Democrat	0.51	0.01	47.43	0.00
Party_Independent_Democrat	0.37	0.01	32.66	0.00
Party_Weak_Democrat	0.37	0.01	33.13	0.00
Party_Strong_Republican	-0.20	0.01	-16.78	0.00
Party_Weak_Republican	-0.13	0.01	-11.10	0.00
Party_Independent_Republican	-0.17	0.01	-14.05	0.00
Ideology_Extremely_Liberal	0.06	0.02	4.10	0.00
Ideology_Liberal	0.08	0.01	8.28	0.00
Ideology_Slightly_Liberal	0.07	0.01	7.63	0.00
Ideology_Slightly_Conservative	-0.04	0.01	-4.50	0.00
Ideology_Conservative	-0.10	0.01	-10.84	0.00
Ideology_Extremely_Conservative	-0.08	0.01	-5.60	0.00
Moral_Very_Nonabsolutist	0.05	0.01	4.64	0.00
Moral_Slightly_Nonabsolutist	0.04	0.01	4.27	0.00
Moral_Slightly_Absolutist	0.00	0.01	0.00	1.00
Moral_Very_Absolutist	-0.02	0.01	-2.22	0.03
Christian_Fundamenlist	-0.02	0.01	-2.48	0.01
Not_Christian_Fundamentalist	0.03	0.01	4.22	0.00
Calls_BlackPeople_Very_Hardworking	0.01	0.01	0.54	0.59
Calls_BlackPeople_Hardworking	0.01	0.01	1.50	0.13
Calls_BlackPeople_Slightly_Hardworking	0.01	0.01	1.60	0.11
Calls_BlackPeople_Slightly_Lazy	-0.01	0.01	-1.59	0.11
Calls_BlackPeople_Lazy	-0.04	0.01	-3.11	0.00
Calls_BlackPeople_VeryLazy	-0.05	0.02	-3.17	0.00

Figure 7. Coefficient Plot
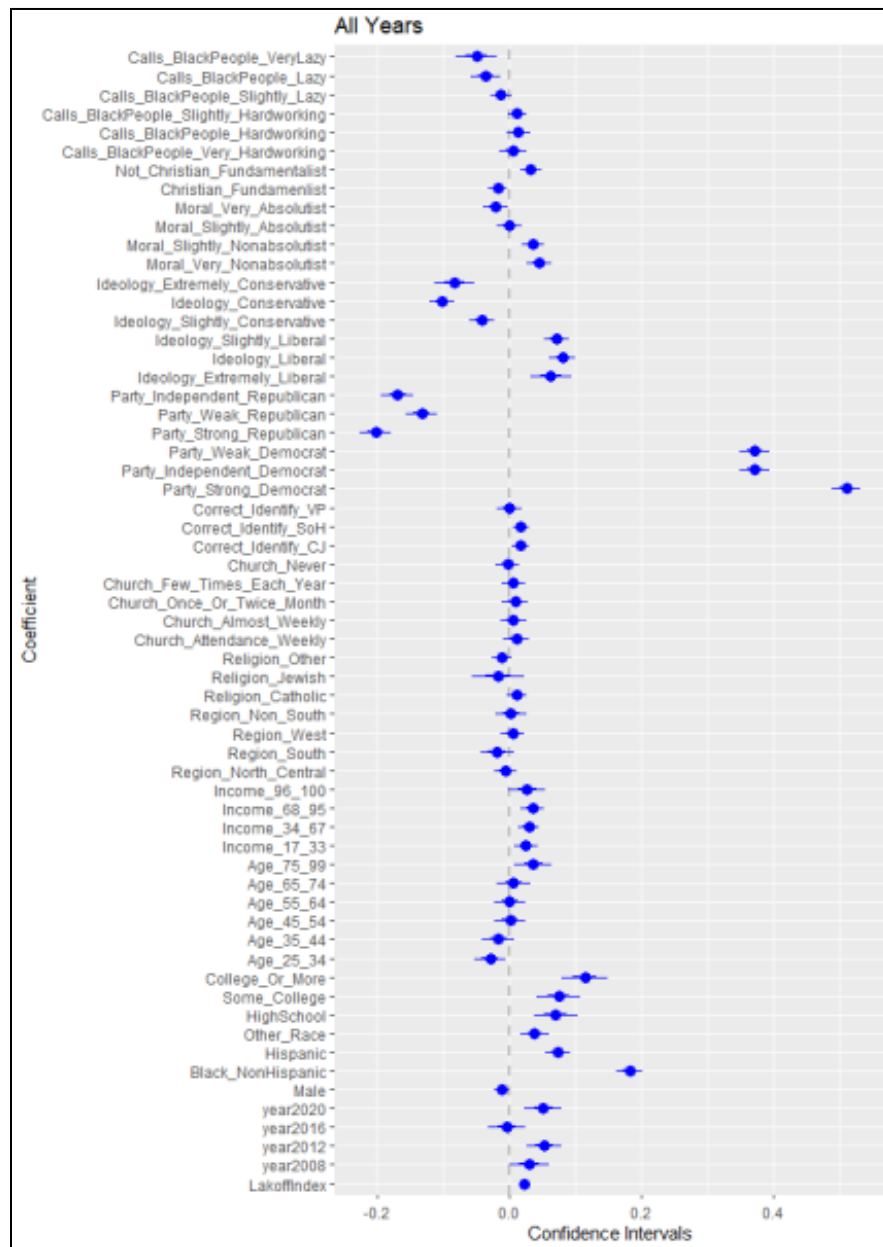
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