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Congre(ss)gation: A Social Network Analysis of Religion and Cosponsorship in the United

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Abstract

Given religion's recent influence on political decisions, we explore its effect on legislative behavior in the United States Congress. We apply a network analysis to all 70,000 pieces of cosponsored legislation from both the 112th and the 117th Congresses to infer a series of political relationships among legislators. From this network we test (1) if religion influences cosponsorship in the congressional network, and (2) if that influence has changed in the last ten years. We find evidence that religious identity has affected legislators' cosponsorship behavior in recent years, but not in the past. This analysis suggests an increase in religion-based polarization in the United States Congress.

Keywords

Cosponsorship, Congressional Networks, Religion, Religious Identity, Polarization

Introduction

The very first words of the United States Bill of Rights attempt to draw a line between religion and politics. At that time most Americans agreed with the statement that Congress should make "no law respecting an establishment of religion or prohibiting its

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free exercise (2016)". However, the recent threat to the domination of Christian ideology has prompted a Republican push to factor religion into political decisions. In the last year, the conservative Supreme Court, on multiple occasions, has ruled in favor of Christians and Christians organizations (Bump, 2023). As we enter a post-roe America, we must understand the depths of religious influence in our politics. Is church still separate from state? Has our congress become a congregation?

We look to study the relationship between religious identity and cosponsorship networks in the United States Congress. Extensive literature supports the importance of cosponsorship as the core activity in building the legislative agenda. As Schiller (1995) demonstrates, sponsorship and cosponsorship are two of the few legislative activities members of Congress have almost total control over. Member's can decide to introduce and support legislation that appeases their constituents, progresses their political career, and initiates institutional change on a variety of policies. While legislators, as individuals, sponsor and cosponsoring bills, scholarship argues a cosponsorship approach is the best method to infer which legislators support which legislatures (Fowler, 2006). With that, cosponsorship has become the most used tie when modeling the social network of congress.

A growing body of literature explores the effects of a variety of identity-based characteristics on cosponsorship networks in the legislative body. This research has focused primarily on basic political identities (i.e., partisanship, political ideology, and district representation) and visible identity characteristics (i.e., race, gender, and ethnicity). Both have provided extensive support for Huckfeldt's (1983) claim that one's community and individual characteristics influence their political actions. Existing research has also found evidence for the psychological theory of Social Identity (Tajfel, 1979), which argues that individuals, especially minority groups, favor those within their own identity-based communities.

However, existing scholarship on identity does not contain research on the effect of religious affiliation in the congressional cosponsorship network. Given religion's intrinsic function as a core component of an individual's identity and its known effect on political ideology (Mctague and Peason-Merkowitz, 2013), there is a skeleton framework that religion influences legislators' actions. Thus this paper provides empirical evidence for the legislators' religious identity affects the congressional cosponsorship network.

In this paper, we examine religious identity among two Congresses: the United States 112th and the 117th . Data on sponsorship and cosponsorship is used in conjunction with network analysis to model the influence of religion in each session. We then compare the resulting networks to understand how the effect of religious affiliation on congressional ties has changed over the ten years studied. With this, we find evidence that religious identities' effects cosponsorship in the 117th Congress, but not the 112th, both in general and also when in-group homophily is explored. This directly contributes to the existing body of literature on recent trends in polarization, specifically the growing political division created by religious differences.

Congressional Cosponsorship Networks

Cosponsorship has become the most common strategy for indirectly inferring legislators' relations and has been used to examine state and federal bodies globally (Neal, 2020). Schiller (1995) argues that bill sponsorship is one of the few activities over which legislators have almost total control. Thus, it is the means by which legislators can introduce and support legislation that appeases their constituents, progresses their political career, and enacts change in a variety of areas. The bill sponsorship system in the United States is designed with one "primary sponsor," which is the legislator who introduces the bill and any number of "cosponsors," who also support the bill but are not responsible for drafting. Although, some bills are coauthored, there is only one

formal primary sponsor; the rest of the legislators who sign their support to the bill are cosponsors.

While legislatures can be thought of as individually sponsoring and cosponsoring data, studies have found that the activity of cosponsorship within when examined as a whole is more reflective of network involvement (Fowler, 2006). Existing scholarship further defends the idea of legislative power of cosponsorship through its ability to set the agenda. Agenda-setting is the process by which policymakers effectively control or manage the issues that receive political attention. While most bills do not pass and less than 4% receive cosponsors, the sponsorship process determines what issues are on the table and, therefore, subject to institutional change (Bratton and Rouse, 2011).

Using cosponsorship data as a tie to connect legislators in the congressional network was largely pioneered by Fowler (2006) when he discovered that analysis normally focuses on which bills legislators will support rather than which legislators will support other legislators. He then used social network analysis to examine cosponsorship from 1973 to 2004 in the United States Congress. Crafting a measure of connectedness, he found that well-connected legislators are more successful at passing amendments and gaining support in roll-call votes, a frequent indicator of political influence.

Identity-Based Congressional Cosponsorship Networks

There is also a growing body of evidence that core characteristics of a legislator's identity have an effect on the congressional network. This tendency, "often described as 'birds of a feather flock together,' is prevalent across social networks in a variety of contexts, from friendship groups to schools and businesses", creating a strong likelihood of its prevalence in Congress (Craig et al., 2015, pg. 2). This connection to the congressional network began with Huckfeldt (1983), who originally theorized that one's community and individual characteristics influence how they interact in the

political sphere. This laid the foundation for an investigation into the effects of race, gender, and ethnic identity on cosponsorship in the congressional network.

Political Identity-Based Congressional Cosponsorship Networks Research using congressional cosponsorship data has identified that, first and foremost, social networks are affected by basic similarities and political identities. Using a multi-level network approach, Gross (2007) discovered that shared committee service, similarity in ideology, and being elected from the same state or region are all factors that contribute to cosponsorship. Meanwhile, Zhang et al. (2007) concluded that cosponsorship networks are influenced by ideology, committee service, and geography. Furthermore Caldeira and Patterson's (1987) findings indicate that legislative relationships are influenced by both propinquity, which refers to the distance between districts or seatmates, and shared characteristics such as similar levels of education, party affiliation, and shared committee assignments.

This body of literature defends the idea that basic similarities, such as being from the state or of the same age, as well as core political components of identity (often job related) affect congressional cosponsorship behavior. Bratton and Rouse's (2011) research reinforces these claims in the validation of their first hypothesis, which provides sufficient evidence that legislatures are more likely to cosponsor measure if those legislators are similar in some significant ways, such as shared background experiences, political interests, or ideological predispositions.

Visible Identity-Based Congressional Cosponsorship Networks While there is a growing body of literature on the effects of homophily (similar visible identity characteristics such as race, gender, and ethnicity), it is far more split than the research regarding the basic components of political identity. For example, Bratton and Rouse (2011) examine numerous social determinants within the cosponsorship network of state legislators. However, their conclusions on the effects of gender and race on legislators'

general propensity to cosponsor varied by state. They found strong correlations between homophily and cosponsorship in Texas and California but moderate effects in the other states of interest. Yet, when they factored minority status into the equation, they found a strong correlation in every state legislature. This means that women, Latino people, and African-American people were relatively more likely to endorse the proposals of others who shared their respective minority status. While they can only hypothesize, Bratton and Rouse (2011) suggest the distinction is due to the social identity theory.

Social identity theory is a psychological concept that provides insight into the characteristics of group boundaries and behavior. At its core, social identity theory argues that a person's sense of self comes from their group memberships. The founder of the theory, Tajfel (1979), found that the process of categorizing oneself as a group member creates a positively valued social identity. Once allegiances have been set, individuals will allocate more resources to the in-group to maximize their benefits over the out-group. Psychologists in the years since have discovered this to be especially true as it relates to minority groups - women, Latino, and African-American legislators (Huddy, 2004). Due to the systematic disadvantages these individuals face, they are more likely to support those within their respective social group over others. While majority group members have the potential to display bias towards their in-group, the effect of a minority identity-based characteristic is more likely to be seen.

As it relates to women, Barnes (2015) examined the structure of the legislature to see if women are excluded from the "men's club." In doing so, Barnes provides extensive background on what encourages women to collaborate in the political sphere. Her analysis provides evidence that women are relatively more likely to cosponsor measures introduced by other women. Wojcik and Mullenax (2017), using survey-based evidence from Brazil's Chamber of Deputies, argue that female representatives engage in higher rates of intragender networking. This means women have more profuse and diverse

legislative networks than male representatives. Together, these findings support the idea that networks are affected by gender identity. Specifically, this provides evidence for in-group favoritism within the gender minority, which supports the psychological claims about the effects of minority identity-based characteristics.

Rocca and Sanchez (2008) support similar conclusions regarding the effects of identity on the network, as it relates to minority racial and ethnic groups. They find that, on average, Black and Latino legislators sponsor and cosponsor significantly fewer bills in Congress than Whites and non-Latinos, respectively. Black and Latino legislatures prioritize sponsoring each other's legislation. Rocca and Sanchez (2008) attribute this conclusion to the components of the social identity theory, specifically the systematic disadvantages in access to resources and the resulting desire to support one's own group. Craig et al. (2015) study the U.S. House cosponsorship network from 1981 through 2004 to highlight the ways in which visible identity characteristics have circumscribed the minority experience. They find that Black and Latino members of Congress are at a comparative disadvantage of race-based assortative mixing in the cosponsorship process. This literature not only supports the idea that race and ethnic identity affect the congressional cosponsorship network but provides more framework for distinguishing on majority / minority lines.

Religious Identity

The literature on the congressional cosponsorship networks is vast. Studies regarding the effects of basic (and political) similarities, as well as gender, race, and ethnicity are becoming increasingly abundant. However, quite surprisingly, there is little (if any) research on how religion influences the congressional cosponsorship network.

Religion is a core component of a legislature's identity, for some as intrinsic as their sex or race, and for others entirely intertwined with their ideology. Given this nature,

we should expect a legislator's religious affiliation to have a significant effect on their political decision. Research has shown it does. Mctague & Pearson-Merowitz (2013) highlight how religious affiliation can predict party affiliation (with Jews representing the most liberal, Catholics and Protestants representing the moderate, and evangelical Christians representing the furthest right). They also explain that the recent growth in partisan polarization over cultural and ideological issues only increases the tendency to follow one's religion to a political party. Religion is, therefore, an intrinsic identity that divides individuals into an in-group and an out-group. This provides evidence that religion has the potential to function exactly like sex, race, and ethnicity.

With that, we have created two hypotheses to fill the gap in the literature on religion within the congressional cosponsorship network.

H1: (general) Legislators will be more likely to cosponsor measures sponsored by colleagues with the same religious affiliation.

H2: (minority group) Those belonging to religious minority groups will be relatively more likely to cosponsor measures introduced by another member of the same religious minority (i.e., Jewish legislators will be more likely to cosponsor bills introduced by other Jewish legislators)

Trends Over Time: Polarization

Social Network Analysis, specifically using cosponsorship as a tie, has long examined cooperation among congressional representatives. As previously explained, modeling the network in this manner, allows for extensive research on the effects of a variety of different identities. Typically this is taken one step further to account for change overtime. When the legislative network is examined in this manner, researchers are able to better understand and qualify the growing polarization in congress over the past decade.

In the United States' two-party system polarization is commonly seen in the growing distinction between the Republican and Democratic parties. However, in its most basic form polarization simply refers to the sharp contrast between two different ideas or set beliefs. Working off of that definition, polarization can be seen in a variety of contexts including gender, ethnicity, and media. Using components of the Social Identity Theory, Neal (2020) distinguishes between weak and strong polarization to provide a foundational understanding of the concept. Weak polarization refers to very high rates of in-group support with low or non-existent out-group relations. This, as he defines it, is categorized by indifference rather than active animosity towards those in other communities. Strong polarization, on the other hand, is the presence of negative relations between the two polarized groups. Research has shown that strong polarization is steadily increasing in Congress and deeply affects legislators ability to introduce and pass legislation. Using a time based approach, cosponsorship networks have been able to show that legislators are more likely to support those with-in their group and oppose those outside. Ultimately, polarization is a growing and active problem within the congressional network.

With that, we have created our last hypotheses to understand if religion is contributing to the growing polarization within the congressional cosponsorship network.

H3: (increased polarization) There will be a stronger effect of religion in the 117th Congress compared to the 112th Congress (measured by legislators being more likely to cosponsor measures sponsored by colleagues with the same religious affiliations).

Research Design

To measure positive relationships between legislators we used a cosponsorship network for the 112th and 117th Congress's separately. In each session we built a network with legislators as the nodes and the edges being the 'level of cosponsorship' which is

measured as the total number of times legislator A cosponsors legislator B's legislation divided by the average number of cosponsorship between legislators per session. This tie is directional as cosponsoring legislator B's bill is a sign of support from legislator A which may not inherently be reciprocated. Thus the cosponsorship network is directed, weighted, and excludes self-ties. In both the 112th and 117th networks we include three edge level covariables: religion, ideology, and party. Religion and party are binary, undirected, and exclude self-ties, with Ideology being weighted, undirected, and excluding self-ties.

In order to assess the effects of religious affiliation over time, we look at the 112th and 117th Congress'. These Congresses were chosen because the 112th ran from January 3, 2011 to January 3, 2013, which was after the 2008 financial crisis and before the election of Donald Trump. Thus, this Congress acts as a 'control' case for how religious affiliation affects cosponsorship. The 117th Congress was chosen as it is the most recent congress to finish a full session running from January 3, 2021 to January 3, 2023. Thus at the time of writing this Congress was recently completed and is the most current Congress with cosponsorship data available. These sessions are also direct mirrors of each other with the 112th having a Democratic President and Senate with a Republican House and the 117th having a Republican President and Senate and a Democratic House.

There are three sets of models used to assess the effect of religious affiliation on cosponsorship. Each model was run for the 112th and 117th session separately. The first set of models assess' the general and polarization hypotheses using network regression:

$$cosponsorship = B_1(religion) + B_2(party) + B_3(ideology),$$

and we expect religion to be statistically significant for the 117th congress but not the 112th Congress due to an increase in polarization. We do not expect party or ideology to be statistically significant, as they are control variables to mitigate covariance.

The second set of models assess the minority group and polarization hypotheses using another network regression model:

$$cosponsorship = B_1(catholic) + B_2(jewish) + B_3(other) + B_4(protestant) + B_5(unknown),$$

and we expect Jewish and Other to be statistically significant in both the 112th and 117th Congress' in congruence with previous literature on minority group activity. We will also expect more religious affiliation groups to be statistically significant in the 117th compared to the 112th due to recent polarization. The final set of models are similar to the second set, except include ideology and party to act as control variables.

Dependent Variable

The dependent variable in our network is `cosponsorship`, which is measured as a weighted directed tie between two Congresspeople. These networks were constructed using the `incidentally` package, which constructs edge lists of member cosponsorship. Ties are weighted as the total number of times member A cosponsors legislator B's legislation divided by the average number of cosponsors per bill in the session. This paper considers legislation to be any of the following proposals in both the House and the Senate: Bill, Joint Resolution, Concurrent Resolution, and a Simple Resolution, as there is precedent for considering all four proposals as 'legislation' in a cosponsorship network (Neal, 2014).

We also used all four of these proposals as 'legislation', as the larger amount of data enables normalized residuals and allows a fuller understanding of cosponsorship across all legislation in each session. Each session constituted between 31,000 and 36,000 total cosponsorship ties between members with a large majority (96 and 98 percent) cosponsoring multiple pieces of legislation.

Independent Variables

There are three independent variables used in our model: `religion`, `ideology`, and `party`. While `religion` is the main focus of this paper, as there exists a gap in cosponsorship literature surrounding it, we also include `ideology` and `party` as control independent variables. `ideology` was built using the absolute difference between legislator's DW-NOMINATE (Lewis et al., 2023) scores and `party` was built using self-reporting identifications of either Republican or Democrat (Mitchell, 2021, Miller (2011)).

Religion

Our primary independent variable is `religion`, which is measured using the CQ Roll Call questionnaire (Mitchell, 2021, Miller (2011)) which asks legislators of the House and Senate identity based questions including religious affiliations. There are a wide range of different religions across Congress with the 112th congress members reporting 38 separate religious groups and the 117th reporting 24. To enable comparison between religious affiliations we reduced these smaller religious affiliations into larger overarching categories. Using the Pew Research Center's (Nadeem, 2022) methodology we narrowed down our `religion` variable to five main religious groups: Catholic, Protestant, Jewish, Other, and Unknown. See figure 1 for the religious breakdown by Congress.

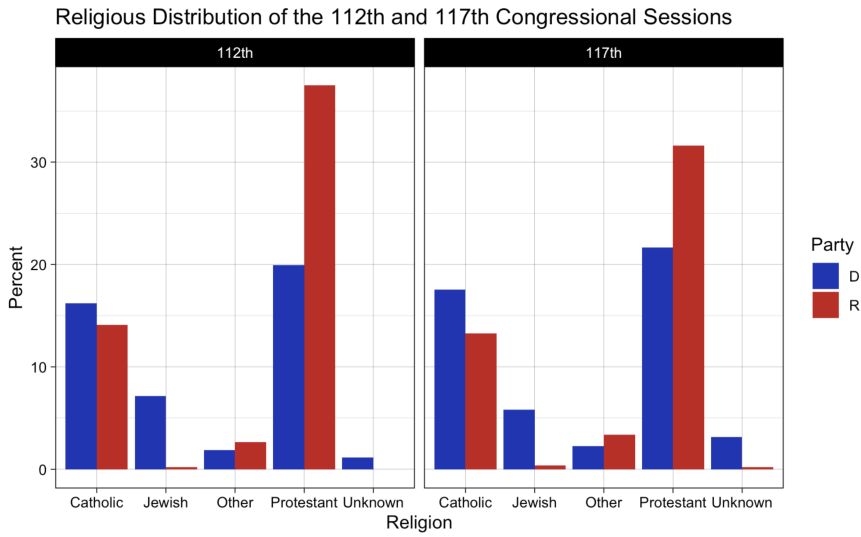

Figure 1. Final breakdown for 112th and 117th Congressional sessions after using methodology from the Pew Research Center.

For the 112th congress we reduced four of the original religions affiliations reported–Anglican, Anglican Catholic, Roman Catholic, and Unitarian–to Catholic. All four of these religions are either Catholic in and of themselves, follow the same religious beliefs as Catholics, or are a smaller branch of Catholicism. We then continued this process, reducing 25 religious affiliations to Protestant, one religious affiliation to Jewish, six religious affiliations to Other, and two affiliations to Unknown. The most interesting category is Other with there being Quakers, Nazarenes, Greek Orthodox, Mormon, Buddhist, and Muslim. These breakdowns can be seen further in figure 2.

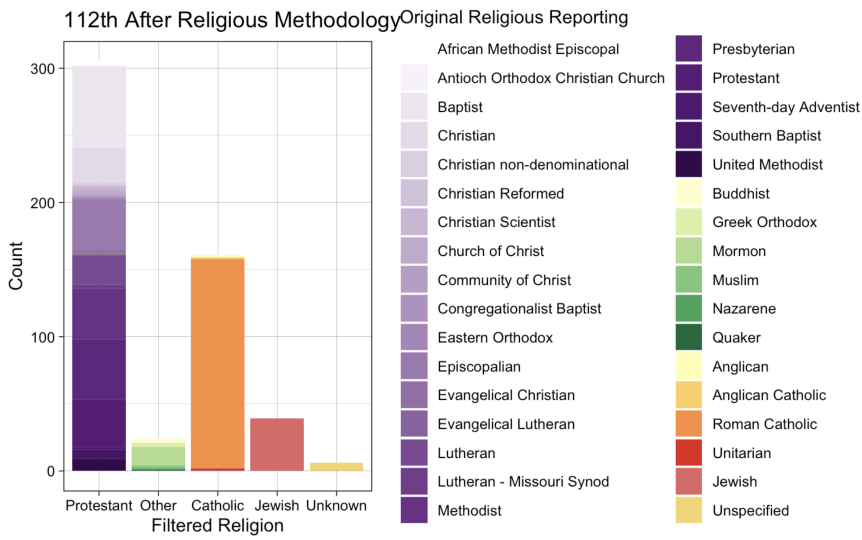

Figure 2. Original breakdown of the 112th Congressional session before using methodology from Pew Research Center. Allows for a better understanding of what the origional categorizations were initially.

For the 117th congress there were 24 broad religious affiliations. By using the Pew Research Center's methodology we separated two affiliations as Catholic, 13 religious affiliations as Protestant, one as Jewish, six as Other and two as Unknown. The Other category is made up of Unaffiliated, Buddhist, Hindu, Mormon, Muslim, and Nondenominational. These breakdowns can be seen further in figure 3.

Across both sessions of congress when two members belong to the same of these five groups they are given a 1 and they are given a 0 if they belong to different groups. Thus this edge level covariable is not directed, binary, and does not include self ties.

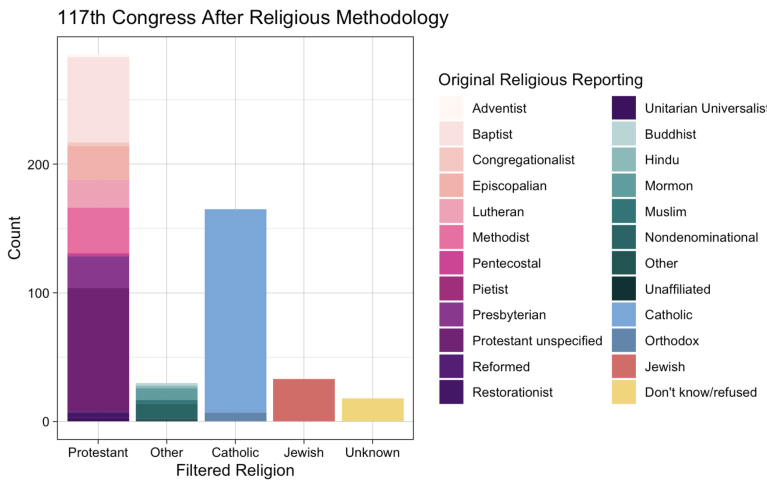

Figure 3. Original breakdown of the 117th Congressional session before using methodology from Pew Research Center. Allows for a better understanding of what the origional categorizations were initially.

Results

Model 1 looks at religious affiliation's effect on cosponsorship for the 112th and 117th Congress' with the control variables of party and ideology. The results in figure 4 show that for the 112th Congress religious affiliation is not statistically significant, meaning we have no evidence to suggest that a legislator of the 112th is more likely to cosponsor legislation with another member of their religious group after accounting for party and ideology. However, when looking at the recent 117th we find that religious affiliation is statistically significant at the .05 alpha level. This means that for the 117th Congress we have evidence to suggest that legislators are more likely to cosponsor legislation with someone of the same religious group after accounting for party and ideology.

112th Congress					117th Congress				
	Estimate	Mean	St. Error	p-value		Estimate	Mean	St. Error	p-value
Intercept	0.0026	0.1798	0.0008	-	Intercept	0.9773	3.0531	0.0088	-
Religion	0.0262	0.0003	0.0011	0.53	Religion	-0.0942	-0.2045	0.0032	* <0.01
Party	0.0012	-0.0282	0.0007	0.38	Party	-2.2986	-0.1447	0.0076	* <0.01
Ideology	0.0003	0.1716	0.0009	0.37	Ideology	0.5295	-0.2823	0.0096	* <0.01

* $p < .05$

Figure 4. Model 1 results. Statistically significant rows are highlighted in blue along with stars next to the p-values.

This model addresses both our general and polarization hypotheses and supports both of them. With evidence for our general in the 117th session, as legislators tend to cosponsor legislation with other members of their religious group more than with members outside of their religious group. There is also evidence that polarization along religious lines has increased between the 112th and 117th congressional sessions since we find `religion` to be statistically significant for only the most recent session.

Model 2 looks at minority group behavior surrounding religion by modeling the likelihood of each religious group to cosponsor legislation with other members of their group. Model 3 looks at the same topic except includes control variables for party and ideology. The results of these models in figures 5 and 6 respectively support part of our hypothesis on minority group behavior. The results are similar for both models and include three main findings: Jewish, Protestant, and Unknown are all statistically significant at the .05 alpha level for the 117th Congress, but nothing is statistically significant for the 112th.

112th Congress					117th Congress				
	Estimate	Mean	St. Error	p-value		Estimate	Mean	St. Error	p-value
Intercept	0.0034	10.8594	0.0002	-	Intercept	0.7199	204.02416	0.0023	-
Catholic	0.0004	0.1466	0.0006	0.43	Catholic	0.1038	-0.0403	0.0061	0.08
Jewish	-0.0004	-0.0991	0.0022	0.85	Jewish	0.7415	-0.0067	0.0289	* <0.01
Other	-0.0034	-0.0420	0.0036	0.47	Other	-0.0938	-0.0164	0.0318	0.49
Protestant	0.0005	0.2424	0.0003	0.15	Protestant	-0.1427	-0.8063	0.0039	* <0.01
Unknown	-0.0034	-0.0447	0.0155	0.85	Unknown	0.7033	-0.5823	0.0535	* 0.01

* p < .05

Figure 5. Results from model 2. Statistically significant results are accompanied by a blue highlighting in the row and a star next to the p-value.

This means that Jewish legislators in both the House and Senate are more likely to cosponsor legislation with other Jewish members, both before and after accounting for party and ideology. While this finding is consistent with our second hypothesis on minority group behavior, we also expected Other to be statistically significant, as this would show that minority groups such as Muslim or Hindu are more likely to cosponsor legislation with other Muslims or Hindus respectively. The next two findings are not consistent with hypothesis 2 as we found Protestant legislators in the 117th are statistically less likely to cosponsor legislation with other Protestants both before and after accounting for party and ideology. Finally we found that Unknown legislators in the 117th are statistically more likely to cosponsor legislation with other Unknown legislators. Again these are not very consistent with our hypotheses as we did not expect Protestants to be statistically significant as they are not a minority group.

112th Congress					117th Congress				
	Estimate	Mean	St. Error	p-value		Estimate	Mean	St. Error	p-value
Intercept	0.0025	0.0056	0.0032	-	Intercept	0.9466	2.4205	0.0088	-
Catholic	0.0004	-0.0120	0.0021	0.36	Catholic	0.0614	-0.4138	0.0054	0.22
Jewish	-0.0008	0.0132	0.0082	0.59	Jewish	0.3901	-0.9262	0.0256	* <0.01
Other	-0.0034	-0.0010	0.0134	0.29	Other	-0.0919	0.6634	0.0282	0.54
Protestant	0.0004	0.0016	0.0012	0.22	Protestant	-0.1501	0.0105	0.0035	* <0.01
Unknown	-0.0039	0.0013	0.0576	0.14	Unknown	0.3685	-0.2788	0.0475	* 0.04
Party	0.0012	-0.0001	0.0027	* 0.03	Party	0.3074	-0.8091	0.0076	* <0.01
Ideology	0.0004	-0.0077	0.0036	0.72	Ideology	-0.7167	-0.0624	0.0096	* <0.01

* $p < .05$

Figure 6. Results from model 3. Statistically significant results are accompanied by a blue highlighting in the row and a star next to the p-value.

However, these findings are consistent with our third polarization hypothesis as we found no religious groups to be statistically significant for the 112th Congress, but many for the 117th Congress both including and excluding control variables identity and party. Thus we find that there is evidence that religious affiliation plays a part in cosponsorship in the 117th Congressional session, but not in the 112th. This suggests the possible increase in polarization from the 112th to 117th sessions.

Conclusion

Our study is the first of its kind, it found a relationship between the identity-based characteristic of religion and the behaviors of legislators involved in the congressional cosponsorship network. As identity-based characteristics have become increasingly politicized and therefore polarized, it is important to understand its effects on the congressional network. Research has shown that political identities (i.e., partisanship and political ideology) and visible identity characteristics (i.e., age, race, gender) affect the ways in which legislatures collaborate and contribute to polarization. In this paper, we

have focused on the United States 112th Congress (2011-2013) and the 117th Congress (2021-2023) to understand the effect of religious affiliation on congressional ties and how that has changed over the past ten years. This paper pioneers a path for studying religion and cosponsorship, and provides empirical evidence that the congressional cosponsorship network is affected by legislators' religious identity.

Given the split result by congressional terms, two major conclusions can be drawn from this research. First, the network analysis of the 117th Congress provides evidence that religious affiliation has an effect on the cosponsorship network. Specifically, this effect is regardless of minority and majority status as both Jewish and Protestant (minority and majority groups respectively) are statistically significant. Practically, this means legislators will be more likely to cosponsor measures sponsored by colleagues with the same religious affiliation, but we have little to suggest minority based homophily outside of Jewish legislators. These findings imply the effects of religion are comparable to other key identity characteristics as discovered in existing reports (Rocca and Sanchez, 2008) .

Secondly, the inconclusive results for the 112th Congress provide evidence that religion did not have a statistically significant effect on the cosponsorship network of 2011 to 2013. While this challenges the general hypothesis that religion would impact the ways in which legislatures collaborate, it does mean religion's effect on the congressional network is a relatively new phenomenon. This, in turn, provides evidence for our third hypothesis, meaning political polarization based on religion has increased overtime .

There were a few anomalies within our research that are important to address and suggest solutions for. We expected the 'Other' category to be statistically significant, as those are other minority groups within Congress and we hypothesized their positive relationship. However, 'Other' includes many different religious groups with drastically different beliefs such as Mormon and Muslim. It seems incorrect to expect these religious

groups to work together more than others. This is an excellent place for improvement, as studying specifically these minority groups against each other could yield positive results. However, realistically that can not happen until there is wider representation of minority religions (i.e. Islam and Mormonism) in Congress. Extrapolating claims based on one or two legislators is quite difficult and would present flaws of its own.

While our study is not the first to limit the congressional terms studies (see Bratton and Rouse, 2011), it is important to note when establishing and making claims about trends. There is always a possibility these terms are anomalies rather than indicative of the direction of congress. Future research should focus on the 10 years between our findings to find the exact shift of religion's influence on congressional cosponsorship.

Despite these limitations, there are substantial practical implications of this paper surrounding methodology for studying religion in relation to cosponsorship in the United States Congress. As the first of its kind, this paper pioneers a new methodology for studying religion in network form, and allows further research to be built upon it. Our paper bridges the gap between existing literature on general cosponsorship and the effects of identity on congressional behavior. Our paper builds on both to find religion's influences on the ways legislators collaborate and therefore collectively build the legislative agenda. This provides a new avenue of research for future scholars. More notably, this paper points to the future of congressional politics, eliciting more questions about the mechanisms that lead to polarization. Further research should explore, how the greater public is impacted when legislatures are influenced by religion when deciding what bills gather support?

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