



Members of Congress and the pictures in their heads: The impact of social media on elected officials

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ABSTRACT

The words and actions of elected officials cannot be fully understood without considering their sources of information. This study examines how social media shapes the information members of the US Congress consume and how their partisan media exposure corresponds with legislative behavior. Using Twitter (X) data from those members a partisan media index (PMI) was developed based on the ideological orientation of 35 news outlets, running from extreme left to extreme right. The analysis reveals that most members' media diets are highly partisan and largely align with party affiliation. Democrats cluster around center-left outlets whereas Republicans show a longer and more right-skewed distribution. PMI scores strongly correlate with member ideology and with subsequent voting behavior. Even when controlling for ideology, partisan media exposure retains a small but significant relationship with voting behavior. The findings indicate that social media following patterns offer meaningful insight into elite polarization and suggest that partisan media ecosystems shape not only public opinion but also the decision-making of political leaders with implications for deliberative democracy.

Keywords: partisan media, social media, congress, political polarization, journalism, ideology

INTRODUCTION

The 117th USA Congress, which ended in early 2023, convened on Sunday, January 3rd, 2021. On the following Wednesday the Capitol Building was overrun not long after President Trump spoke to supporters at his "Stop the Steal" rally where the crowd was encouraged to fight to keep him in office. The events of that day played out in the halls of Congress and in the media. On most traditional news outlets the story was clear: a pro-Trump mob descended on the Capitol intent on preventing the joint session from tallying the electoral college results. On social platforms and on some partisan media outlets, this picture was challenged. Social media influencers Lin Wood and Rogan O'Handley, both Trump supporters, were quick to post a counternarrative, that the riot was perpetrated by leftwing activists including Antifa and Black Lives Matter agitators who were dressed up as Trump supporters. These posts spread quickly on Facebook, Twitter and Instagram (Reuters, 2021). One popular piece of evidence was a tattoo evident on the hand of one rioter alleged to be a hammer and sickle symbol but later shown to be from a video game. These types of social media posts, including one with a digitally-altered CNN report, were fact-checked and debunked by multiple publications but were amplified by partisan television and web outlets. And some members of Congress came to echo, and shape, that narrative. Arizona Congressman Paul Gosar tweeted the riot had "hallmarks of Antifa provocation" (Reuters, 2021). Representative Mo Brooks, who's actions that day remain under scrutiny, made a similar claim, as did Florida congressman Matt Gaetz.

The descriptions of January 6th by members of congress were starkly divergent. Representative Seth Moulton characterized participants as a violent mob while Representative Andrew Clyde said their actions that day could be seen as a normal tourist visit. Representative Alexandria Ocasio-Cortez feared for her personal safety while Representative Paul Gosar later called demonstrators "peaceful patriots" (Kaufman,

2021). How do these members come to see this event in such different ways? Certainly partisanship is a factor. But what is the role of media consumption in shaping the beliefs and attitudes of elected officials? One hundred years ago Walter Lippmann wrote about the role of journalism in influencing the “pictures in our heads” (Lippmann, 1922). His focus was on public opinion rather than government leaders and that guided decades of media effects research. For most of that time a small number of outlets with very large audiences dominated the media landscape. The modern environment is comparatively fractured and polarized. How skewed, today, are the pictures in the heads of our elected representatives? Is there a difference between the political parties in the consumption of highly partisan media? Based on congressional media habits alone, can we predict how members will vote on contentious issues? What is the relationship between media habits and member ideology? This study addresses these questions and makes an original contribution by introducing a partisan media index (PMI) that quantifies the partisan orientation of the Congressional media diet. By linking this index to members’ ideology and legislative votes it extends theories of selective exposure and partisan media effects from the mass public to political elites.

LITERATURE REVIEW

Partisan Media Before Social Media

The year 1996 is as good as any other to mark the beginning of the modern partisan media era and the decline of the era of objectivity in journalism. Several things happened that year that would prove to be pivotal. These include the births of Fox News and MSNBC News, the telecommunications act of 1996 (Hmielowski et al., 2016) and the migration to the web by nearly all national news outlets along with an increasing number of Internet users. The Telecommunications Act loosened regulation that led to greater media cross-ownership, consolidation, cuts to news staffs and arguably a decline in traditional news quality and an increase in partisan content (Hmielowski et al., 2016; Horwitz, 2005; McChesney, 1999). Fox News and its primetime slant was popular immediately, particularly among conservatives. Years later MSNBC also embraced an ideological strategy. Media consumers began sorting themselves by outlet with further effects on how they perceived news and the world around them (Gil de Zúñiga et al., 2012; Iyengar & Hahn, 2009). A similar sorting was taking place online, particularly with the advent of blogs. Those blogs situated in the political middle tended to attract little attention but those with a clearer ideological position drew large audiences (Baum & Groeling, 2008; Scott, 2007). There was a willing audience for news with a partisan slant. Lippmann (1921, p. 119) would not have been surprised: “We do not see what our eyes are not accustomed to consider. Sometimes consciously, more often without knowing it, we are impressed by those facts which fit our philosophy.”

Social Media and Partisan Bubbles

There was optimism at the dawn of the social media era that it might be a force for democratization. Twitter, in particular, was soon associated with antiauthoritarian demonstrations around the world (Christensen, 2011; Morozov, 2009; Mungiu-Pippidi & Munteanu, 2009). But it became clear that the process of political polarization would be enhanced by the algorithms of popular social media platforms. These technologies have allowed users to customize their political information consumption which can directly impact political attitude formation (Dylko et al., 2017). This has implications for the kinds of news you are exposed to (Turcotte et al., 2015) and then the kinds of news you are likely to share with others. In a study of social media and selective exposure, Winter et al. (2016) found evidence of confirmation bias which was particularly strong for users with a “defense motivation,” selecting content useful for defending their worldview. In a study on the role of social media in creating polarized “filter bubbles,” Kitchens et al. (2020) found that Facebook was associated with moving users toward more partisan sites for news consumption. Reddit, on the other hand, was associated with a shift to more moderate sites. Twitter had little effect in their study.

Partisan news sharing has been a major focus of scholarly attention. Shin and Thorson (2017) found that Twitter users would share political fact-checking information with their networks when it denigrated the candidate they opposed or made their preferred candidate look better. One key to amplifying a social post may be the anger it generates in the reader, according to a study by Hasell and Weeks (2016). In particular,

they found that partisan content that generated anger toward a specific candidate was more likely to be shared. Emotional content in general was found to drive sharing in a study of more than 300,000 Tweets from 22 news organizations (Hasell, 2021). Furthermore, moral framing of partisan news content was found to be an important factor in the virality of posts on Facebook (Xu et al., 2020). The social opinion amplification model (Lim & Bentley, 2022) proposes that extreme partisanship is an outgrowth of individuals posting increasingly partisan content to gain attention. The authors found support in their study for this model.

In addition to partisan news, misinformation has been a focus of research in recent years. A study of social media content from InfoWars.com, a frequent source of misinformation, found that items coded as containing "conflict" were more likely to be shared (Wischniewski et al., 2021). The authors also found evidence of motivated reasoning, content shared aligned with the social media user's politics based on an examination of social profiles and posted content. A recent experiment found that disinformation was also more likely to be believed when the one posting it appeared to be an ordinary citizen as opposed to a partisan media outlet (Hameleers et al., 2023). The study's authors concluded that this finding pointed toward the value of social bots and trolls in spreading propaganda. Allcott and Gentzkow (2017) found that a small but significant percentage of the electorate was consuming and sharing this kind of misinformation. Specifically, fake news items benefitting the Trump campaign were shared 30 million times on Facebook while fake news items benefitting the Clinton campaign only 8 million times. The trend toward polarization on social networks can occur when users are more likely to block or unfollow those who share misinformation they disagree with (Kaiser et al., 2022).

The journalism industry, already under duress by the competition for attention that social media represents, is further challenged in its role as fact checker of social disinformation. Labeling conservative misinformation as erroneous has made the industry a target of political attacks, mostly from the Republican party (Carlson et al., 2021). These attacks on journalism may also be driving some news consumers to politician's social media posts as an alternative source of politics and current events. These users have a more negative attitude toward journalists than users who don't follow politicians on social media (Fisher et al., 2019).

The problem of misinformation on Facebook, Twitter, and the other social networks has grave consequences for countries around the world (Vaidhyanathan, 2018) and its effects have proven to impact not just the uneducated but a broad swath of citizens. While most of the attention has focused on the impact of partisan media and misinformation on voters, it's time to turn our attention to the impact this content is having on people in positions of power - our elected representatives.

Congressional Polarization and Social Media Use

While media use has become increasingly partisan since the late 1990s, the US legislature has become more polarized as well (Campbell 2016; Hetherington, 2001; Neal, 2020). The research literature is not unified on the explanation and there are likely numerous factors. One is the rapidly changing media environment. To win races 30 years ago congressional candidates relied on mainstream media coverage from a relatively small number of outlets. Republicans had to be conservative enough to win primaries but moderate enough (and electable enough) to win general elections and a similar dynamic applied to Democrats. Even in strongly partisan districts you still needed coverage from the "free media" to reach voters. In moderate districts, your views had to appear "mainstream" enough to win in a general election. For most of the 20th century there was a solid contingent of moderate Republicans and Democrats elected to Congress.

In the 21st century, however, the media environment was changing and it became harder for moderates to win. With the growth of cable channels (some partisan) and blogs (some very partisan) and social media, candidates could reach voters in new ways. You could win a primary through a combination of favorable partisan media coverage, social media and paid media. Turnout and enthusiasm for general election candidates became as important, or more important, than favorable coverage by traditional news outlets. The few moderates in Congress generally received (and still receive) harsh coverage by partisan media outlets. They became more vulnerable to primary challenges and fewer moderates would even run (Thomsen, 2014). The result is a congress with very strong partisans on both sides and a tiny contingent of moderates. There is some evidence that partisan media and political polarization are a particular problem for the US compared to other countries (Kobayashi et al., 2024).

Today almost every member of Congress maintains social media accounts and some are very active. A Pew study found that members of the House and Senate maintained more than 2,000 Facebook and Twitter accounts and posted 100,000 times a month during 2020 (Van Kessel et al., 2020). The top 10 percent of Congress (by Facebook and Twitter total followers) received "more than three-quarters of all favorites, reactions, shares and retweets on these platforms" (Van Kessel et al., 2020, p. 6). But even the less popular members are doing far more social media communication than just five years ago. Looking at the median member, posts have almost doubled from 2016 to 2020, likes per post have gone from 6 to 75 and shares from 4 to 26 on average. Facebook posting and engagement has risen less dramatically over the same period among members. The parties have some differences, with more posting and engagement on Twitter for Democrats, for example (Shah & Grant, 2021).

But major differences are apparent in what is being shared. The Pew study recorded the links shared by members on Facebook and Twitter. In 2016, 52 percent of the links shared were exclusive (or nearly exclusive) to one party or the other. In 2020 that number rose to 67 percent (Shah & Grant, 2021, pp. 13-16). Many of the most common domains in their dataset are media outlets. Some examples: 100 percent of Breitbart links in 2020 are from Republicans and Fox News is 97 percent Republican. Huffington Post and MSNBC links are both 99 percent from Democratic lawmakers. The percentages for all of these were lower in 2016; link polarization has increased (Shah & Grant, 2021). There are some linking patterns that have changed even more substantially. In 2016, 78 percent of Associated Press links came from Republicans. In 2020, most AP links came from Democrats (71%). A similar pattern was true for links from CBS News and The Hill with the narrow majority of links coming from Republican members in 2016 but a sizable majority of links coming from Democratic members in 2020. Many Republican members stopped including links at all in 2020. The percentage of Republican posts with links fell to 22 percent when it had been 36 percent of posts in 2016 (Shah & Grant, 2021). Affective polarization theory explains the distrust and animosity members of the opposing parties often feel for each other (Iyengar et al., 2019; Törnberg, 2022).

While the Pew studies reveal much of Congressional social media behavior, one thing they do not report are the accounts being followed by the members of Congress. We can infer, from the aggregate link data they do provide, what kinds of media the parties are paying attention to (and especially what they are sharing). But this data is lacking at the individual member level along with a means of measuring the partisanship of the member's media diet. That is the purpose of the study reported here.

RESEARCH QUESTIONS

The literature reviewed above related to polarization of Congress, partisan media and affective polarization theory led to the following hypothesis:

H1: The partisan distribution of the Congressional media diet will exhibit polarization as evidenced by a non-normal distribution.

Two additional research questions (RQs) will examine the possible political polarization of the Congressional media diet:

RQ1: How do the two political parties compare in their media diets?

RQ1a: How many members of Congress exhibit signs of being in a media bubble, following only media that aligns with their ideology?

In addition to describing the media habits of members of Congress, is it possible to associate these habits with subsequent behaviors? To what degree can member's votes on legislation be foreshadowed by their media consumption?

RQ2: What is the relationship between members' PMI scores and subsequent voting behavior?

A positive relationship between member's PMI scores and their subsequent voting record during the 117th Congress may be likely given the partisanship inherent in Congress. A further test is to use PMI scores to predict the likelihood of members breaking ranks with their own party. These two related questions were examined:

RQ3a: Within the Democratic congressional caucus, what is the relationship between PMI scores and subsequent voting behavior?

RQ3b: Within the Republican congressional caucus, what is the relationship between PMI scores and subsequent voting behavior?

Another means of predicting future voting behavior is based on members' ideology as measured by prior voting behavior with DW-Nominate, a widely-used measure (Lewis et al., 2019; Poole & Rosenthal, 1985). It is worth testing for a relationship between members' partisan media scores and their ideology.

RQ4: What is the relationship between members' PMI scores and DW Nominate scores?

Finally, does partisan media consumption have predictive value when controlling ideology as measured by dimension one of DW-Nominate.

RQ5: Controlling for ideology, what is the correlation between PMI scores and subsequent voting behavior?

METHODS

Twitter was used for data gathering in this study due to the relative transparency of the network and its application programming interface. Most accounts on Twitter are set to public and it's comparatively easy to make a record of which accounts are following which. To answer the RQs, the Twitter accounts of each member of the House of Representatives (431 voting members during data collection with 4 seats vacant) and each member of the Senate (100 members) were examined in late June and early July of 2021. Some members maintain more than one Twitter account, but one account is recognized as the "official" account for government business. Other accounts are personal accounts or campaign accounts. In the case of multiple accounts the one most likely to be used by the actual member of Congress was selected. This was the process: the official account was selected unless

- (1) the bio stated the account was run by staff in which case an alternative account was sought,
- (2) the official account was written in third person while an alternate account of the member was written in first person,
- (3) a recently elected member's new official account showed little activity (or follows) while an alternative account was active (and following many accounts) and was written in first person.

Measuring Media Diets

Members of Congress are following thousands of other Twitter accounts, many of which are media outlets. These include traditional media outlets like *CNN*, *Fox News*, and the *New York Times* along with non-traditional and very partisan media websites like *Judicial Watch*, *RedState*, and *American Greatness* (followed by 70, 65, and 5 Republican members of the House, respectively) on the right, along with websites on the left like *Crooks and Liars*, *Palmer Report*, and *Jacobin* (followed by 14, 13, and 5 Democratic members of the House, respectively). To manage the scope of the content analysis, a subset of media outlets was selected by comparing the Ad Fontes media bias chart (version 7, 2021) to the accounts being followed by the Twitter accounts of the members of Congress described above. The Ad Fontes media bias chart has been used by many researchers as practical and dependable way to assess partisan content (Heseltine, 2025; Sparks & Hmielowski, 2023). It was started by attorney Vanessa Otero in 2016 and has evolved into a company with a team of about 20 analysts who sample content from dozens of media outlets and score them on an ideological scale as well as a reliability (accuracy) dimension. It is the 7-category ideological scale, from extreme left to extreme right, that is of use in the present study. Ad Fontes has published a description of their methodology (Ad Fontes Media, 2021; Otero, 2019) which is summarized here. They sample at least 15 items from each media outlet based on prominent placement on the respective websites. Each item is coded by three analysts, one self-described liberal, one self-described conservative and one self-described centrist. Each receives 20 hours of training and are asked to rate the political positioning of the article (an equal treatment of the Democratic and Republican position would score neutral as would an absence of both), the language used in the article (the use or absence of demeaning adjectives and other loaded terms) and how the article compares ideologically to all those previously rated by the coder. These components are summed up and compared with the ratings of

Table 1. Media sample for PMI scoring

Extreme left	Hyper-partisan left	Skews left	Middle	Skews right	Hyper-partisan right	Extreme right
Wonkette	MSNBC	NY Times	AP	NY Post	Fox News	Redstate
Palmer Report	Rawstory	Washington Post	Reuters	Washington Free Beacon	Daily Caller	Big League Politics
Crooks and Liars	DailyKos	CNN	CBS News	Real Clear Politics	One America News	Judicial Watch
Truthout	Jezebel	Guardian	The Hill	Zero Hedge	Breitbart	American Greatness
Jacobin	The Root	Huffington Post	Roll Call	Reason	Washington Times	American Thinker

the other coders. Discrepancies in the scores are discussed as a group and each coder can adjust their ratings before the three are averaged. As of 2021, the Ad Fontes group reports that 20,000 items have been scored by its teams of analysts (Ad Fontes Media, 2021). The system used by Ad Fontes Media is imperfect. Coder reliability scores, for example, are not reported. Their chart has been criticized for presenting a false equivalency between the left and the right (Benjes-Small, 2021). Despite the flaws, however, the chart does generate a wide dispersion of partisan media scores and a systematic way to measure the media diets of members of Congress.

The Media Sample

Every media outlet on the Ad Fontes media bias chart, version 7 (over 80 outlets) was compared with media outlets being followed by the members of the 117th Congress for overlaps. This narrowed the Ad Fontes list by nearly half. From the remainder, 5 media outlets from each of the 7 categories on the Ad Fontes media bias chart (version 7) chart were selected. Some outlets were not selected because their scores put them on the border between two categories. For example, Politico had a score that put it on the border between the “neutral” and the “skews left” categories and the Wall Street Journal had a score that placed it between the “neutral” and “skews right” categories. See **Table 1** for the 35 media outlets used to generate the PMI for this study.

Partisan Media Index Scoring

There are a number of ways to measure an individual’s media diet, most of them using survey data. Moehler and Allen (2016) created a partisan media diet imbalance score using national Annenberg election survey data that measured media use for dozens of outlets based on the respondents’ self-reports. Such reports would be problematic for elected officials (“I read all the papers”). But Twitter allows us to see exactly which accounts are being followed by each member. While a member could be consuming media in other ways too, the accounts being followed on Twitter give us an objective insight into the kinds of sources they see each time they are using the app.

Data Collection

Between 20 June 2021 and 12 July 2021 each member’s Twitter account was compared to a Twitter account created for this project that was following only the 35 media outlets in **Table 1** using the “compare users” tool at Followerwonk.com. This tool produces a list of accounts being followed by any two accounts entered. The outlets were recorded for each member. Those in the “extreme” categories had values of -3 (left) and +3 (right), the “hyperpartisan” categories -2 (left) and +2 (right), the “skews” categories -1 (left) and +1 (right) with the neutral category scoring a 0. Averages for each member were calculated.

RESULTS & ANALYSIS

The methods described above generated PMI scores for 98 of 100 members of the Senate and 421 members of the House. Senator Mitch McConnell and Senator Jack Reed do not follow any of the media accounts studied and are excluded from the analysis that follows. In the House, 4 seats were vacant, 8 members followed no media accounts and 2 members deleted their Twitter accounts in early 2021.

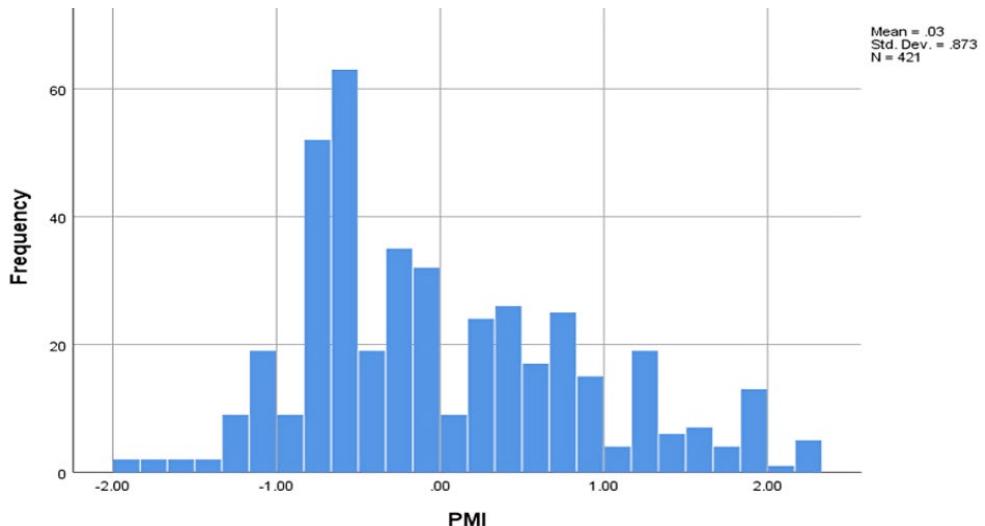


Figure 1. House PMI histogram (Original data and work by the author)

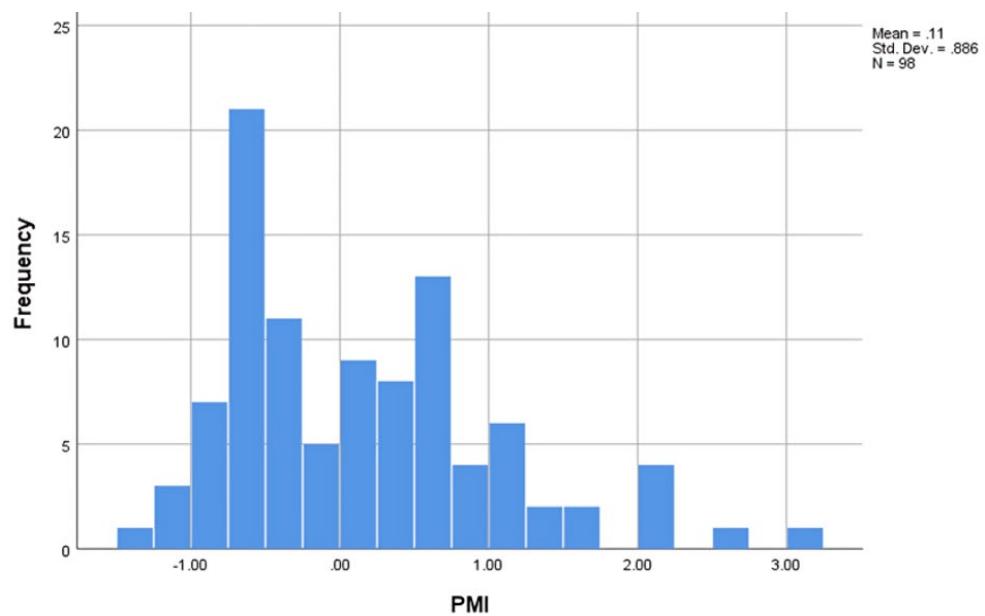


Figure 2. Senate PMI histogram (Original data and work by the author)

Results for Hypothesis 1

The hypothesis was tested by examining the distribution of PMI scores for Congress. Of the 421 House members who were following at least one of the 35 media outlets tracked, the average number of outlets followed was 8.7 (standard deviation [SD] = 4.7). One member, Representative Claudia Tenney of New York, was following 27. PMI scores for House members ranged from -2.0 on the left to +2.33 on the right. The average PMI score was 0.03 (SD = .87).

In the Senate the average number of media accounts followed was also 8.7 (SD = 4.7). PMI scores for the Senate ranged from -1.33 on the left to +3.0 on the right with an average PMI of 0.11 (SD = .89), more conservative than the House. The histograms for the House (Figure 1) and Senate (Figure 2) reveal a spread of PMI scores that are not normally distributed.

The House distribution is bimodal and skewed, exhibiting a longer tail on the right. A Shapiro-Wilk test of normality confirms the departure ($W = .956$, $p < .001$). The Senate distribution is similar with bimodality apparent and a much longer tail on the conservative media side. A Shapiro-Wilk test confirmed the departure from normality ($W = .937$, $p < .001$). For both the House and the Senate, **H1** is supported.

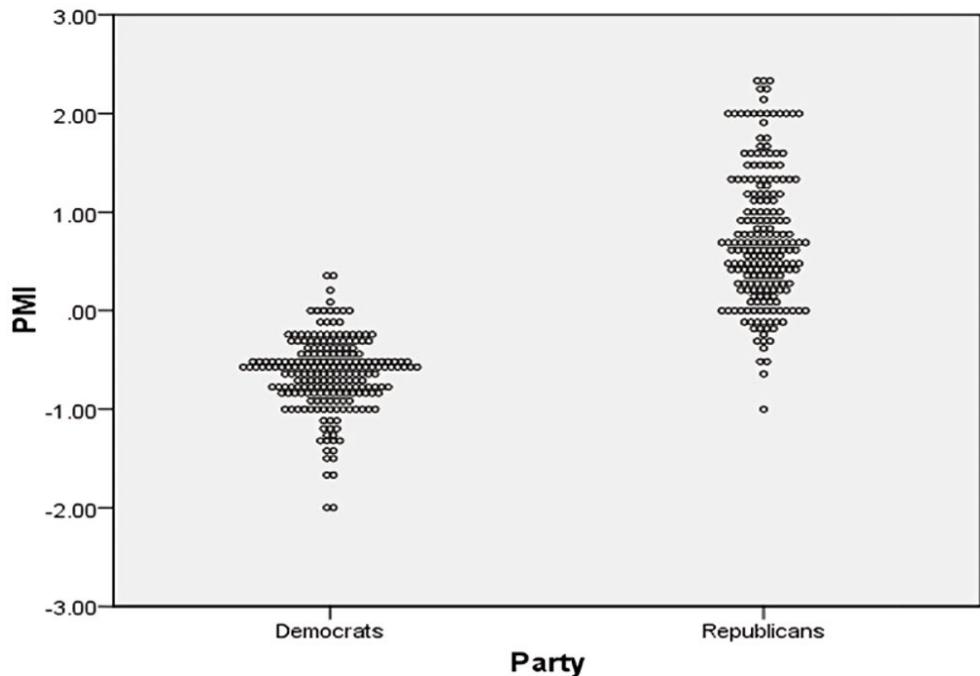


Figure 3. House member PMI plot by party (Original data and work by the author)

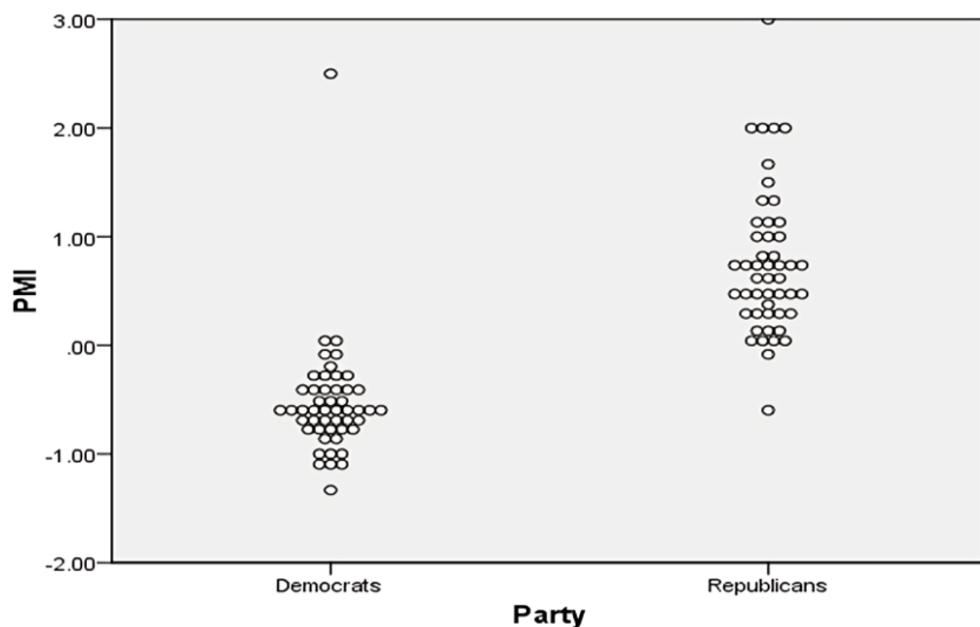


Figure 4. Senate PMI plot by party (Original data and work by the author)

Results for RQ1 & RQ1a

The first pair of RQs called for a comparison of the two political parties. A plot of PMI scores by party illustrates the differences between the two. **Figure 3** (House) and **Figure 4** (Senate) show a similar pattern. House Democrats are clustered around center-left media scores ($M = -.64$, $SD = .36$) while House Republicans are more dispersed (mean [M] = $.73$, $SD = .68$), running from neutral scores all the way to a large group with very extreme PMI scores. Those members are following not just *Fox News* (the most followed partisan outlet on the right) but also sources like *One America News*, *Redstate*, and *Judicial Watch*. There's a similar pattern in the Senate with Democrats being a half point left of the midpoint ($M = -.54$, $SD = .53$) and Republicans a little further to the right and more dispersed ($M = .75$, $SD = .67$).

Among Democrats in the House, two members have PMI scores that are more than two SDs to the left of the M. Among Republicans, 18 have scores more than two SDs to the right of the M. Put another way, the five media outlets in the “most extreme left” category have 52 total follows among the Democratic members of the House. The five media outlets in the “most extreme right” category have 137 total follows among Republican members of the House.

There is a similar pattern in the Senate with no Democrats beyond 2 SDs from the M while there are 5 Republicans that far to the right. There is one outlier case worth mentioning, visible in [Figure 4](#). Senator Chris Murphy, a Democrat, has one of the most conservative PMI scores of 2.5. He follows only two media outlets in this study, Breitbart and Redstate. Social media follows can occur for a wide variety of reasons which speaks to the limits of inferring all media consumption based on one social media platform. Nevertheless, the similarity of the House and Senate distributions overall lend some confidence to the approach offered here.

More than half of the Democrats in the House, 134, follow none of the media outlets in the skews right, hyper-partisan right or extreme right categories. Among Republicans, 66 are following zero media outlets among the skew left, hyper-partisan left or extreme left. Most of these 134 Democrats and 66 Republicans are following at least one of the neutral media outlets. But 20 Republicans and 12 Democrats are following only media that skews a little or a lot toward their own ideology. The picture in the Senate is similar. Party members tend to consume media that skews in their own direction along with one or more neutral outlets. But there are 3 Democrats and 6 Republicans in the Senate who only follow media biased in their preferred direction.

Results for RQ2, RQ3a, and RQ3b

To test the predictive power of PMI scores on voting behavior, members' PMI scores (completed just prior to 15 July 2021) were used to predict voting records for the remainder of the 117th Congress (15 July 2021 through 23 December 2022). Each member's voting record was compared to the Biden administration position on each bill. Across 85 votes in the House and 33 in the Senate, agreement with President Biden ran from 0.0123 to 1.0. These were correlated with members' PMI scores. For the House, the correlation was large and significant. Lower PMI scores predicted higher Biden support and vice versa ($r = -0.801, p < .001$). In the Senate, the result was similar ($r = -0.756, p < .001$). The results for **RQ2** demonstrate the predictive power of PMI scores on subsequent votes by members of both congressional chambers.

A greater challenge for the predictive power of PMI is to discriminate between members within a party. **RQ3a** focuses on Democrats in the House and Senate. In the House, Democratic PMI scores correlated weakly with their subsequent voting during the 117th Congress ($r = 0.224, p < .001$). In the Senate the correlation was not significant ($r = 0.114, p = .431$). For **RQ3a** the results show only limited predictive power of PMI scores to subsequent votes.

A slightly different result was found for **RQ3b** and Republican members of Congress. In the House there was a significant but modest correlation ($r = 0.314, p < .001$) and in the Senate the result was similar and significant ($r = 0.337, p < .05$).

Results for RQ4 & RQ5

RQ4 asks about the relationship between member's media habits and their ideology. This was tested using dimension one of DW-nominate (Lewis et al., 2019; Poole & Rosenthal, 1985) as a measure of member ideology. This measure is based on member's votes on previous bills. The correlation between ideology and PMI scores is very strong in the House ($r = .802, p < .001$) and in the Senate ($r = .756, p < .001$).

Finally, the **RQ5** asks whether PMI scores are correlated with voting records when controlling for member ideology. In the House, the partial correlation was significant but weak ($r = -0.161, p < .001$). In the Senate, the partial correlation was also significant and weak ($r = -0.187, p < .05$). In both cases, there was a consistent negative relationship where lower scores predicted higher Biden support even when controlling for member ideology.

DISCUSSION & CONCLUSIONS

It is interesting to find that you can make very good predictions on member's votes on contentious issues without knowing their names, their districts or even their party, but it is not surprising. In today's media environment, knowing the sources a person follows on social media gives you most of what you need to know. To summarize the key findings: members of the House and Senate are following media outlets on Twitter that mostly conform to their own ideology. Patterns in PMI scores confirm partisan clustering with greater rightward dispersion. Democrats were mostly clustered around center-left media while Republican scores were further from the M and more spread out. Some had very moderate media scores and a large contingent were following only the most partisan sources. Overall, the distribution of PMI scores were not normal but skewed, with a longer tail on the right. This finding mirrors that of Heseltine (2025) who also found asymmetric polarization in the social media of Congress with more extreme ideology on the right compared to the left. The findings also confirm the previously discussed work on political polarization of Kitchens et al. (2020) and Kaiser et al. (2022).

There was a strong correlation between member's partisan media scores and their votes on partisan issues. This was true for the Senate ($r = -.756$) and the House ($r = -.801$). Ideology was strongly associated with PMI scores as well. Controlling for ideology, a partial correlation between PMI scores and voting records remained significant but small. While it may be the case that a member's ideology drives both their media choices and their subsequent votes, the small but significant partial correlation suggests a separate effect of media consumption. And ideology comes from somewhere; it is not fixed. During the Trump administration we saw during just a few years how dramatically a party's ideology can shift. Voters learned from President Trump himself what the new rules for the party would be but the media also played a role, one which continues. Unraveling the which-came-first question will require a study with a longer timeframe than the one presented here. But it's clear from this report that the sources of information being relied upon by some members of Congress are unlike those of 20th century Congresses. The findings are in line with those of Neal (2020) on increasing polarization evident in Congress.

Limitations of the Research

The "media diet" measure employed in this study was based on the publicly available data of one social network, then called Twitter, and during one period of time (summer 2021). Most people, including members of Congress, consume other media which may not be reflected by their Twitter follows. And some members may follow outlets for the purpose of monitoring the opposition as the case of Senator Chris Murphy may demonstrate (discussed in the results to **RQ1** and **RQ1a**). This research relied on a media sample drawn from Ad Fontes Media (2021). While they use trained coders to classify outlets into partisan categories they do not report reliability figures. There is potential bias in the ideological scoring of media outlets.

Significance for Deliberative Democracy

There are reasons to believe the consequences of this for democracy are largely negative (Stromback, 2023). Misinformation is a problem for everyone online. It spreads rapidly on social media because of confirmation bias and the often surprising nature of "fake news" (Vosoughi et al., 2018). The amplification of falsehoods among the public and elected officials undermines the quality of informed decision-making in a democratic society. Even if the information consumed by elected officials were accurate, the one-sided nature of many of the outlets they are following places them in an echo chamber, damaging their ability to communicate effectively "across the aisle." Polarization can hinder meaningful dialogue and compromise, eroding democratic debate and negotiation (Ardèvol-Abreu et al., 2024; Beaufort, 2018). Social media's instantaneous nature has reshaped political discourse, with short-form content often overshadowing nuanced discussions. Complex issues are oversimplified, weakening constructive debates. And the anonymity and distancing offered by social media platforms coarsens dialogue and promotes hate speech and incitement. This can lead to the amplification of extremist ideologies which further erodes the quality of deliberation by legislative bodies (Alvares & Dahlgren, 2016).

Social media platforms have also been exploited by propagandists seeking to manipulate opinion and interfere with democratic processes (Moore & Colley, 2022). Foreign interference via social media campaigns

has been a major issue for a decade and remains a significant problem (Pierri et al., 2023). It is evident that the impact of such messaging is not limited to average citizens looking at Facebook but can influence elected officials at all levels. Despite some efforts, the social platforms themselves have proven ill-suited to combating the problem. Removing content and reducing interactions between accounts runs counter to the business model.

Recommendations & Possible Paths Forward

The problem of extremism and misinformation on social media is a complex one. Some platforms reward content that generates strong emotions receives more engagement, whether people are agreeing or disagreeing, than content that is less emotional (Berger & Milkman, 2012). Hate speech is boosted by the algorithm and without counter measures by social network management will proliferate (Vaidhyanathan, 2018). And social networks could limit this type of content but not without controversy. For example, Facebook employed editors who worked to keep misinformation from trending on the platform. But faced with criticism from conservative media outlets during the 2016 presidential campaign, Facebook stopped doing this. Misinformation spiked immediately (Duguay, 2018). Twitter, at points in its history, has taken an aggressive stance against hate speech by banning offenders and taking countermeasures against automated bots. Many of these policies were curtailed or reversed when Elon Musk bought the social network. The result has been predictable, an immediate rise in hate speech (Hickey et al., 2023). This content affects the citizenry, of course, but it also impacts on those that make it into the halls of power who also consume it. When they begin to parrot the messages they have received, a loop that challenges the foundations of democracy can result. The way out is not obvious.

Currently, social networks are protected from responsibility for the negative consequences of the content they spread due to Section 230 of the communication decency act of 1996. A potential solution would involve removing part or all of that protection which would open these platforms to lawsuits by treating social media companies as something more like publishers. Critics of this approach worry that forcing these companies to more strongly moderate content would lead to First Amendment violations.

Another potential solution is not in legislation but in a change in behavior by consumers. Media literacy efforts focused on emerging technologies could help consumers if they easily find out how to check content in real time (Hassan et al., 2017).

Another solution could come in the form of a change in attitude by consumers. The late 19th century was also a period of misinformation, sensationalism and scandal. The lower cost of newspaper production had led to a proliferation of content and fierce competition for readers. Standards of truth gave way. But this era was followed soon after by the rise of "objectivity" in journalism and a century where that goal defined the kind of media consumed by most Americans (Mindich, 1998). Our current media environment bears some resemblance to the late 19th century. The cost of production has been dramatically lowered by the Internet and social media. The competition for an audience is high and standards of truth, particularly on social platforms, have declined. We can hope that our present situation is followed by a rising desire for "facts" but how that shift might occur is hard to see.

A hundred years ago Walter Lippmann made an observation that could also describe today's world: "The present crisis of Western democracy is a crisis of journalism" (Lippman, 2020). Our modern problem is similar. The Trump era, a break in norms in so many ways, has challenged traditional journalism. Perhaps the bigger problem, though, is that the population no longer consumes that journalism. While much of the 20th century was a "strong news media" period, the 21st century is so far characterized by its weakness. There are fewer readers and viewers of news. And those who do consume it are choosing partisan sources over those characterized by what we used to call "objectivity."

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