

# **TWEETERS AND LEADERS: INSTITUTIONAL POWER AND TWITTER ACTIVITY IN CONGRESS**

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**This draft was circulated for the Georgetown University Department of Government's Graduate Working Group on March 20, 2024. Please do not circulate or cite without permission.**

## **Introduction**

Billy Long and Blaine Luetkemeyer are remarkably similar. Both men represented the state of Missouri in the 116th Congress, both from primarily rural areas, though Long's gerrymandered district wrapped in the outskirts of Kansas City. The men were born three years apart, in 1955 and 1952 respectively, making them just older than the average age of a member of Congress during this time. They both won the election in 2018 by a roughly a two-thirds margin and both men are ideologically in the center of the Republican caucus (Lewis et al. 2023). At the time, neither had served in any form of party leadership and did not have a committee chair or ranking position. Over the four years of this study, the two Congressmen voted the same way on over 91% of the bills they saw. These two men (who also share initials) feel almost like duplicates.

When you have two cases that are so similar on every demographic and political covariate, the expectation is that their behavior would be similar in most contexts, at least to the degree that those covariates were predictive of the behavior we are interested in. As noted above, this is mostly the case for these two Missourians, with a notable exception. In the 116th Congress, Blaine Luetkemeyer tweeted from his two associated accounts 587 times, less than one tweet per day. In contrast, Billy Long tweeted 31,187 times over the same period, or almost 43 times per day. Despite being so similar across so many metrics, these two men undertook polar opposite strategies when it came to tweeting. This puzzle is at the core of this paper. What makes one member of Congress a "Tweeter" and the other a normal rank-and-file member?

This paper seeks to better understand the differences in Twitter behavior between members of Congress, with a particular focus on an unexplored dimension: differences between members of varying institutional power. Currently, we have a broad theoretical understanding of why politicians choose to be on social media in the first place, but much less work on the micro-foundations of individual use patterns. Though prior work acknowledges differences in adoption (Chi and Yang 2011; Lassen and Brown 2011) and in style (Russell 2018, 2021)

between members, there is very little to suggest what leads to differences in usage rate, particularly for members who are on the high-end in usage. In her book *Tweeting is Leading*, Russell (2021) notes that these differences are potentially driven by individual personnel decisions or the idiosyncratic nature of communication staff in Congress. If so this likely makes the problem much harder for political scientists to untangle. This paper takes an inductive approach to understanding these differences. Beginning first with what we observe in Congressional Twitter data, do patterns appear to help us understand the kinds of members who are very online and those who are not.

Ultimately, this story is descriptive. First, can we learn something about members of Congress based on how frequently they tweet and what is contained within these tweets? And second, does what we learn about them tell us something about how Congress functions in the current moment? While there is some kind of mechanism that dictates communication strategy, many of the variables associated with this would be quite difficult to measure or are unobserved. For example, hiring a certain communication director who is committed to not only tweeting frequently but engaging in a certain kind of online persona is not something easily captured via quantitative methods, however, it is certainly a causal factor in determining the kind of behavior I am interested in. For this paper, I take the inductive approach of beginning with what we observe, the tweets themselves, and then try to see if they show us a kind of structure within Congress. Taking a causal approach would likely only give us weak evidence to stand on as the underlying question here is causally unidentified (Angrist 2009). That said, there is good reason to believe that developing a typology of Twitter usage and then using it to analyze how Congress behaves can yield fruitful results (Gerring 2012). Numerous studies have taken a similar approach in the past (Chi and Yang 2011; Gulati and Williams 2012; Lassen and Brown 2011; Russell 2021). What this study adds to this literature is the first approach to at looking how institutional power impacts an MC's approach to Twitter, with a particular interest in members who do not have institutional power but communicate frequently. By doing this, I hope to show how the incentives of online platforms have given rank-and-file members a way to raise their stature and particularly shape the narrative as much if not more than those with power within the institution. If this is the case, it has important implications for understanding how Congress functions in the current digital landscape.

## **Institutional Power and Communication**

One of the most important goals a member can aim to achieve in Congress is having a position of institutional power – that is, being either a party leader or a committee leader. These positions come with vastly different roles, resources, and responsibilities but they separate the rank-and-file members from those who have control over the institution, its agenda, and the kinds of policy it produces. This power has been explored for both party and committee leaders and the process of setting the agenda of Congress certainly impacts the way Americans perceive

the institution from afar (Cox and McCubbins 2005; Shepsle and Weingast 1987). Agenda setting in Congress gives these members an upper hand in both controlling and engaging in the narrative coming out of Congress each day.

Despite being leaders, the basic motivational structure is the same for all members of Congress. That said, leaders take on additional motivations. A top concern for all members is reelection, but leaders have an additional set of incentives that come with their role that influence them to behave differently than the rank-and-file (Mayhew 1974). Bawn's (1998) work on party leadership tells us that members in leadership, particularly in majority leader positions, must be concerned with at least two additional goals: party maintenance and reselection. Party maintenance, or the keeping together of your majority, causes party leaders to shift attention to different factions within their party who may have leverage over them due to extreme preferences on a given issue.<sup>1</sup> Additionally, a parallel to reelection, reselection in the leadership position, is always in the minds of these members. In similar ways, committee leaders have the goals of advancing their policy agenda through committees and controlling the focus of the work their committee does. While these positions are primarily determined by seniority on the committee in the modern Congress, members are placed strategically and committee leaders have a good level of autonomy over the work done there.

Party leadership is a hierarchical organizational structure, that differs between the Republican and Democratic parties, but ultimately serves to organize and advance the party's goals in Congress. These positions include the Speaker of the House, majority and minority leaders, whips, conference chairs, and, not by necessity the unique, though similar, leadership positions the parties have devised themselves. These members typically have additional staff and resources associated with their positions as well as specific responsibilities. While we might expect that some of these leaders would tweet more, particularly those at the top of the leadership structure whose job it is to guide the party's strategy, the effect on members lower in the hierarchy (i.e. chair of the conference) or with specific tasks that might take them away from communication (i.e. Whips) is unknown. This leads to research question 1:

**RQ1:** Do members of party leadership tweet more frequently?

Though there is no shortage of work on the topic, the literature on party leadership could be more focused on their communication. In general, scholars are more interested in the relationship between leadership and members, and while this sometimes leads to specific exploration of individual positions, often research considers the whole of leadership. Party leaders are seen as agents of their party (Aldrich 1995; Aldrich and Rohde 1997; Rohde 1991) and interparty polarization and intraparty homogeneity can create differing levels of power for

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<sup>1</sup> Speaker Kevin McCarthy's (R-CA) fight with a small contention of the House Freedom Caucus over government funding that ultimately lead to his ouster is a recent example here.

leaders. Except for the top of the party leadership structure, it would make relatively little sense for these members to be active Twitter users as their responsibilities of party maintenance would turn them inward and toward relationships within Congress rather than outward and relationship toward the press.

In our current era of slim Congressional majorities, MCs have devoted an increasing share of their resources to communication staff, often at the expense of policy staff. This is largely due to the difficulty of legislating, but the increasing ease of communicating rapidly and to a large audience. The nationalization of politics has also changed the dynamics of Congressional communication. National issues now lead the day for all members of Congress, meaning a focus on local issues may not bring the same return. This would be especially true for the highly public members of leadership whom journalists often turn to when getting a sense of what the party is up to. Instead of powerful majorities, perhaps as Lee (2016) shows, leaders may turn to Twitter in an attempt to gain traction and attention heading toward the next election.

The case of committee leaders is a bit different. The definition of committee leader I use throughout this paper is either the committee chair or the ranking member. I use the approach for several reasons. First, while the committee chair is the obvious and uncontested leader, the ranking member represents the most important member of the minority party on the committee, through which all of the minority's desires and decisions are filtered. These members are ranking members due to their minority status, not because of any decision the party of leadership has made. If their party wins the majority in the chamber next election, in most circumstances the committee leader and the ranking member would simply swap titles. For this reason, it is useful to think of them both as leaders within the committee even though they have vastly different levels of power.

Committees are congress at work (Wilson 1981). Given this is the locus of so much of Congress's work, and typically a place where individual member participation is more impactful, committees could serve as an important area for individual member communication. Taking credit for policy outcomes is a central tactic used by MCs and committee work presents ample opportunity, particularly for leaders, to take direct credit for the action of the committee (Mayhew 1974). The inverse of this could be true with blame avoidance and the ranking member, where strong communication regarding opposition may pay dividends. Russell (2021) shows that a large number of MCs cultivate a rhetorical agenda around policy expertise and communicate on Twitter about the actions they are taking, often in committee. For leaders, the position comes with additional resources that can be used on committee staff.<sup>2</sup> For these reasons, Committees seemed poised to be a particularly fruitful area of digital content creation.

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<sup>2</sup> In interviews, I have found that one of the key tasks of these staffers is to create content highlighting the work of the committee for members to share via their digital strategy.

That said, the work of committee leaders is often tedious and involves intricate policy details, arcane language, and bureaucratic decision-making. High-profile hearings are only a small part of their job and policy resources are better spent at this level. For many of the committees, policy experts or those with personal connections to an issue are placed in positions of power. These members could be pulled toward the work of policy rather than communication. Given that not all committees are equally powerful or productive, the effect of committee leadership may be relatively weak on overall communication strategy anyway. Perhaps committee leaders are among the quietest members of Congress? After all, the loudest voices seem to be partisan warriors and not policy wonks.

**RQ2:** Do committee leaders tweet more?

## **Member Characteristics and Strategy**

The vast majority of MCs do not hold a position of party leadership or committee power. Though the average level of daily Twitter usage is relatively small, many members choose to develop active accounts on the platform. There could be many reasons for this, but I expect some of this to be driven by a desire to move up within the institution, gain power within it, and control policy. Though there are differences in communication strategy that are visible (positions of power were explored above) there are many factors we expect to influence this that are not easily observable, like individual staffing decisions, the idiosyncrasies of individual communication staffers, and so on. In contrast, there are likely many individual characteristics that might be correlated with highly active usage. The kind of MC that comes to mind when you think of a highly active user likely shares similar features – ideological extremity, youth by Congressional standards, ambition, and many others. In this section, I want to think through how individual characteristics might influence the decision to be active on Twitter as a member of Congress.

### *Ideology*

Two canonical examples of highly active Twitter users for either party are known by their initials: AOC and MTG. Representatives Ocasio-Cortez (R-NY) and Taylor Greene (R-GA) share little in common in terms of political preference, but quite a lot in common in terms of characteristics. They are both young by Congressional standards, ideologically outliers within their party, early in their Congressional careers, women, and members of the House with no positions of leadership. Thinking through these personal characteristics, there are several I want to focus on in terms of their effect on Twitter usage.

**RQ3:** Do members who are ideologically extreme tweet more frequently?

There are many reasons to think ideologically extreme members may turn to Twitter. For one, being out of step with the majority of the party and likely the party leadership may influence them to go around partisan gatekeepers and directly to the media. Work by game philosopher (Nguyen 2021) demonstrates the way that Twitter's design incentivizes users to say extreme things resulting in a gamified version of communication. Given attention is incredibly valuable to members without power, those with extreme views would be better positioned to credibly say the kinds of extreme statements that the platform seems to favor.

That said, these members may be skeptical of the kind of coverage they might get, often distrust the media, and might prefer other means of communication with their constituents. Additionally, members who are close to the center of their party ideologically are more likely to move up the ranks of the party structure and are more numerous. Perhaps ideologically extreme members are not unique in their usage after all.

### *Age and Experience*

Digital communication in Congress is in some ways a multi-decade trend that started with the first personal websites and email newsletters (Cormack 2016; Druckman et al. 2018; Druckman, Kifer, and Parkin 2009; Hellwege and Cormack 2022), but in other ways is changing and developing each year as new platforms bring new affordances to Congress (Ellison and Vitak 2015; S. K. Evans et al. 2017; Gibson 1977). Beginning from the earliest days of digital communication studies in Congress, younger members have been more willing to adopt new communication technologies as a part of their strategy (Chi and Yang 2011; Lassen and Brown 2011).

**RQ4:** Do age, experience, or seniority influence the decision to tweet frequently?

This research question splits across several related concepts. First, as mentioned above age is popularly conceived of as being a consistent predictor of using digital technology, but when you are thinking about MCs Twitter use is now ubiquitous. Does the age of the MC matter as much as the savvy of their staff? While it is still the case that younger members are more likely to adopt a wider array of platforms to communicate (Epstein 2018), is this difference substantial given the proliferation of digital communication in Congress?

Second, one element that would likely influence an MC to be highly online is their level of ambition. While accurately measuring active or even latent ambition at the individual level in Congress is untenable, there are related measures we can use to get at the concept. Black's (1972) work on ambition remains a key piece on this topic and one way we could measure this is through legislator experience – did they previously serve in a state legislature and have advanced

to Congress? These members may be among the most active because they have exhibited a desire to move up within the ranks of American politics, perhaps they even leaned on Twitter to do so. In contrast, these members may be more focused on their careers as legislators and less likely to be active online.

Lastly, does seniority, or time spent in Congress, lead to an increase or decrease in online activity? While many of the most senior members will have moved into leadership positions, potentially confounding effects here, there are certainly those who remain in the rank-and-file. These members often have much more stable positions within Congress and may not feel the pressure as much as newer members to get their names and faces in front of the media. Additionally, these members may be more interested in their legacy, leading them to focus less on the day-to-day Twitter drama and more on the longer-term implications of their work.

### *Race and Gender*

Given this paper is focused on the way institutional power impacts digital communication, there must be a discussion about how women and MCS of color are historically underrepresented both in Congress (Swers 2013) and in leadership positions. As a result, individual legislator identity is a form of institutional power.

**RQ5:** Does race or gender impact the decision to tweet frequently?

Existing work by Evans and colleagues (H. K. Evans and Clark 2016; H. K. Evans, Cordova, and Sipole 2014) has demonstrated differences in the way and style female MCs tweet. While this would lead us to expect that female MCS tweet more frequently, it could be the case that the primary difference is in the topic and kind of communication they do, rather than the overall frequency. After all, creating an online brand around tweeting frequently may play into sexist stereotypes about women in politics (CITE). There is reason to believe that female legislators may push through this anyway. Elizabeth Warren (D-MA), the Squad<sup>3</sup>, Majorie Taylor Greene (R-GA), and Lauren Boebert (R-CO) are all among the most active Tweepers and are all women.

The research on race and digital communication is understudied. There are very few studies that look explicitly at this question, but we can make assumptions about how this might work. Members of color are underrepresented in positions of power and are more likely to be rank-and-file members. This may mean the most effective way to get their message across is to turn to Twitter due to its lack of gatekeeping and flattening of existing power structures. Research has shown how racial justice movements have relied on Twitter for organization and

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<sup>3</sup> A nickname given to the progressive House members Alexandria Ocasio-Cortez (D-NY), Ilhan Omar (D-MN), Rashida Tlaib (D-MI), and Ayanna Pressley (D-MA).

strategy, so members who are closer to these political movements may be more comfortable with the platform. On the other hand, not all members of color are activists, they come from broad and diverse backgrounds from around the country. A large portion of members of color are elected from districts that exist due to the Voting Rights Act's mandate of majority-minority representation and may see their duty as representing their community well via policy.

## **Tweeters and Leaders**

In the sections above, I have considered questions about how power within Congress and individual characteristics might lead to differing levels of Twitter activity with the goal of this being to help get a sense of which MCs chose to develop an active Twitter presence and whether they have defining traits. What I would like to know is whether these MCs, who I will refer to as "Tweeters", are different from the rest of Congress in meaningful ways. While the above sections considered the individual factors that might lead an MC to Tweeter status, a more important question remains: do these members communicate in a way that is different from either their rank-and-file peers or party leaders?

**RQ6:** Do tweeters talk about different topics?

**RQ7:** Do tweeters use different tones?

Whatever the answer to these questions may be, there are important implications for modern Congressional representation. If Tweeters represent a meaningful departure in topics from other MCs, then we could potentially think of these members as policy entrepreneurs looking to raise the salience of issues they believe the party or leadership is not paying attention to (Kingdon 1984). In her work around Senator's rhetorical agendas, Russell (2021) finds that each member has a mix of topics (policy-focused and partisan) that they tweet about and that individual members' focus in Congress largely drives these. My question is slightly different than this in that I expect this idiosyncratic individual-level effect to be there but am interested in whether the Tweeter label meaningfully captures something about what these active members communicate about.

Additionally, do Tweeters use a different tone or style of communicating than their less active counterparts? As a platform, Twitter offers a unique set of incentives for users, giving preferential treatment to tweets that elicit engagement from other users, usually those that are extreme and appeal to anger (Nguyen 2021). Again, leaning on Russell (2021), we know that some members are more likely to engage in partisan tweeting than others. This move toward communicating partisan differences rather than bridging gaps to move legislation is part of a broader trend in Congress (Lee 2016). Taking this a step further than where the literature has been thus far, here I am interested in not just classifying the tweet level topic, but getting at



whether the language used by Tweeters is systematically different than their peers. Do we see a distinct separation between members who tweet actively and those who do not?

## Data and Methods

At the heart of this paper is the goal of looking at differences in power and communication strategy to whether interesting divisions lie within them. To get at this, I employ a scheme of classifying all MCs into one of four categories: party leaders, committee leaders, tweeters, and rank-and-file. This provides a helpful way to view different levels of institutional power as well as communication activity. Each member will belong to only one group based on their position within Congress. I begin with individual-level data on each sitting member of the 116th and 117th Congresses from the Voteview project (Lewis et al. 2023). Party leaders are any member of their party leadership structure and can be viewed as the members with the highest level of institutional power. Here I use Volden & Wiseman’s (2023) legislative effectiveness dataset that codes each member based on their position within party leadership. For committee leaders, I take a slightly different approach than this data in that I classify both chairs and ranking members as committee leaders. Here I hand-coded the committee leadership position based on the Congressional Quarterly Almanac.

Categorizing differences in Twitter usage is slightly more challenging as no official or even standard approach exists. What I would like to capture though is the difference in Twitter usage between members without institutional power. Extant literature on Congressional Twitter use has established that there are meaningful differences in usage rates between the parties and between chambers (Russell 2018). Therefore, for my coding scheme, any member who is not in one of the leadership positions and tweets more than their party-chamber mean is considered a Tweeter. Everyone else is left in the rank-and-file category.

For every sitting member of Congress in the two congresses I am interested in, I have all tweets from all accounts associated with either them as an individual, their office, or their campaign. This adds up to four years of tweets from 1280 accounts or about 3.03 million tweets. Each tweet is paired with the member associated with that account and their typology label, giving me the ability to compare both the frequency and content of tweets associated with each member. The breakdown of the total number of members in each category for the 116th and 117th Congresses is shown in Table 1.

	116th Congress	117th Congress
Party Leader	85	80
Committee Leader	30	40

Tweeter	256	263
Rank-and-File	169	161

TABLE 1: Breakdown of Categories for 116th and 117th Congresses

The first part of the analysis is comparative across the different types and corresponds to the first five research questions. This approach allows for a detailed examination of patterns between political and demographic factors. The second part of the analysis relies on natural language processing methods to utilize the text of all of the tweets to tell us something about the members. First, I use a Latent Dirichlet Allocation (LDA) model to identify the ten topics used across the entire data set. I use the posterior probabilities to assign each tweet its most likely topic. From here, I examine patterns in the usage of the topics across the groups of interest in the sample. As a follow-up, I use an approach similar to that of Soroka, Young, and Balmas (2015) and rely on the Lexicoder Sentiment Dictionary to assess the sentiment of each tweet. I utilize several metrics here to get at the overall sentiment of a tweet. Then, I use several measures to get at the sentiment of the tweet: the proportion of positive words, the proportion of negative words, subjectivity, where :

$$\text{Subjectivity} = (\text{Positive Words} + \text{Negative Words}) / \text{Total Words}$$

## Results

We begin by looking at the differences in average daily tweets by the four types of MCs explored above. For the descriptive evidence below, results are shown across both congresses. This is partly because members change categorization between congresses, so grouping them together would erase the impact of a particularly active member influencing their group. It also allows for the examination of trends between congresses to see whether the differences are best explained by group status or other political variables not captured in my scheme.

Figure XX gives the breakdown by group of average daily tweets for both Congresses. The types are ordered by the frequency of their Twitter activity, which helps to immediately identify the hierarchy of activity. Tweeters are the most active of all the groups tweeting over 4.5 times a day on average. They are followed by party leaders who lag them only by less than a full tweet per day. Committee leaders average two fewer tweets than their party leadership counterparts with rank-and-file members tweeting somewhere between once or twice daily. Importantly for the validity of the measure, the groupings maintain their hierarchy between the two congresses, implying that these groups are stable and represent some kind of characteristic about the MCs that make them up.

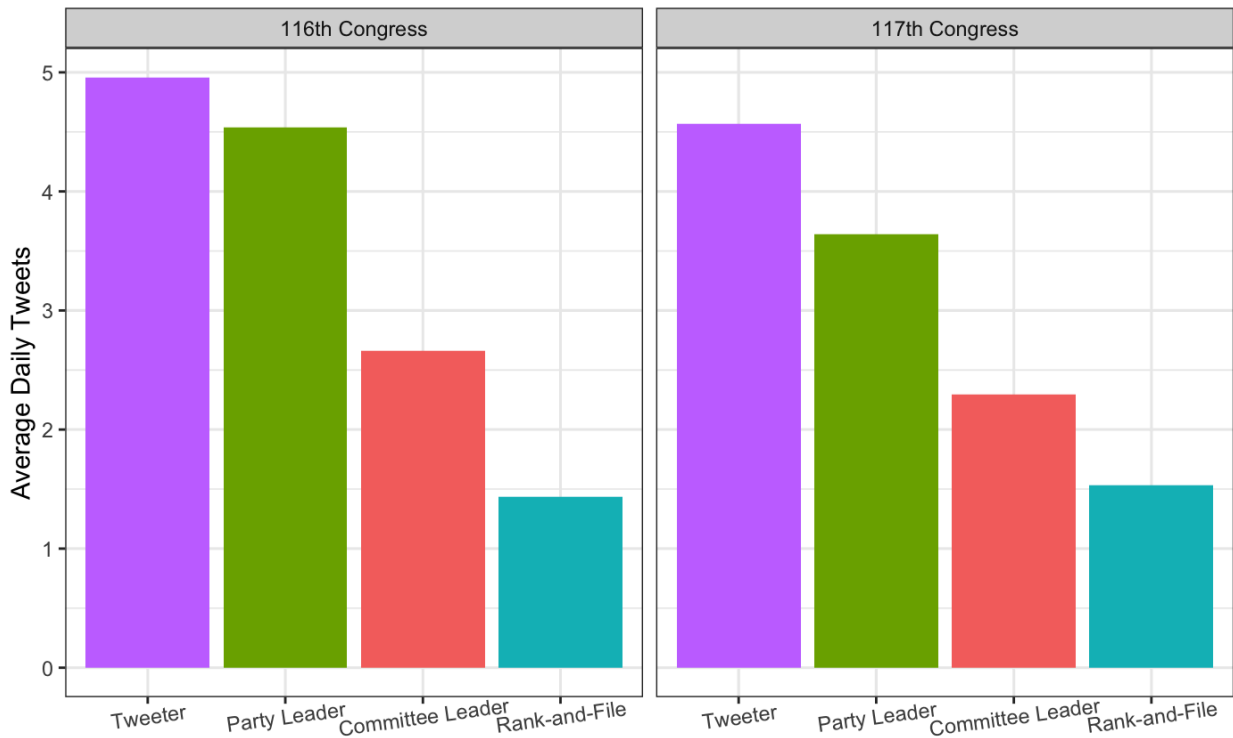


FIGURE XX: Average Daily Tweets for Each Typology

The graphical evidence above leads us to believe that party leaders are more active on Twitter as a function of their leadership role. Figure XX below shows the comparison of just members of the party leadership to the rest of Congress. In both cases, party leaders are more active than the rest of Congress. This lends credence to the theory that these members utilize their resources to communicate more frequently than those outside of leadership and do so as part of their duty as national leaders (Lee 2016). While the rest of Congress tweeted around 3.75 times daily across the two cases, the 117th Congress saw a decrease of about a tweet per day from leadership. This evidence gives support in the positive for RQ1. Party leaders are more active on Twitter by a sizable margin over their peers.

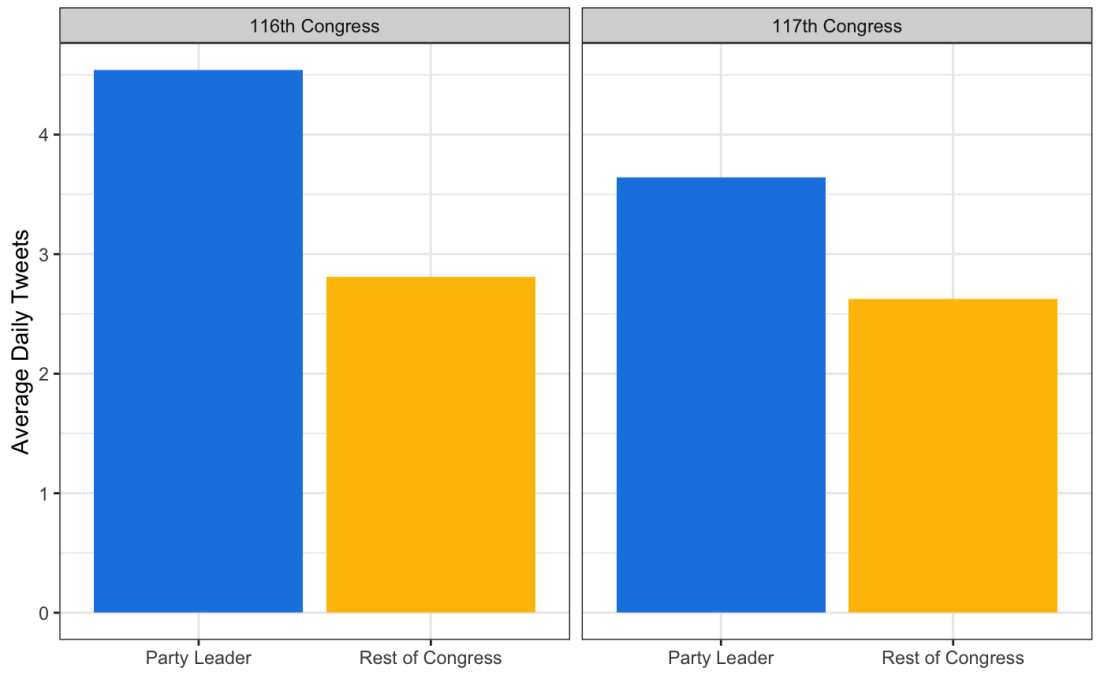


FIGURE XX: Party Leaders Daily Average Tweets Compared to Rest of Congress

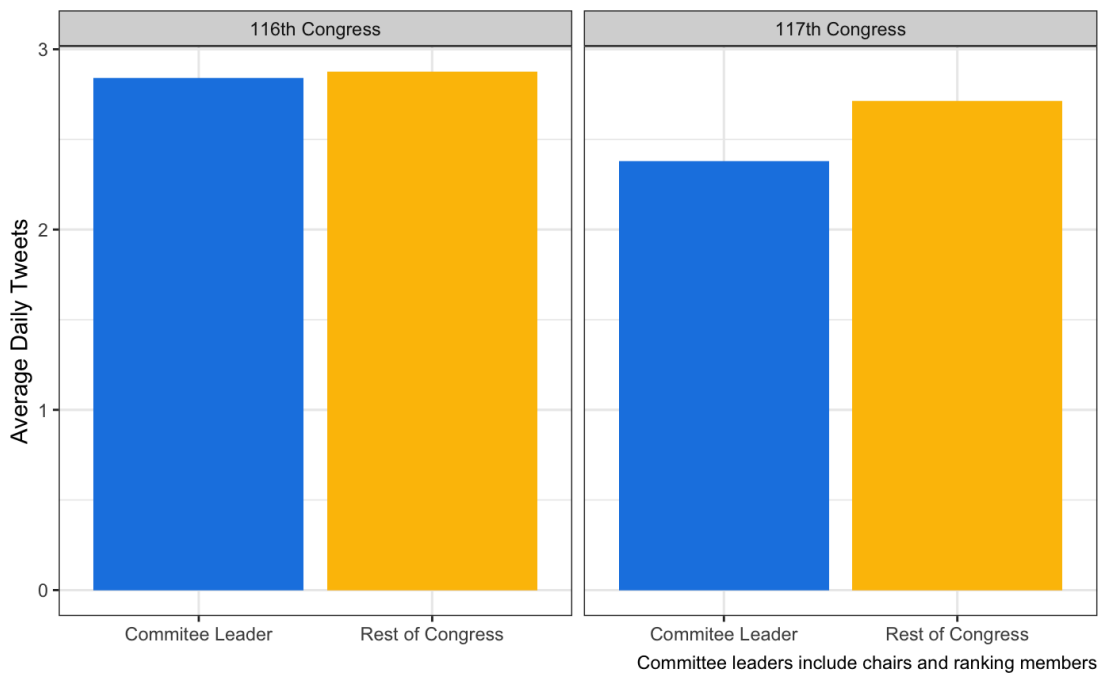


FIGURE XX: Committee Leaders Daily Average Tweets Compared to Rest of Congress

Turning to Committee leadership, Figure XX shows the same comparison for this group. Across the two congresses, the rest of Congress outpaces committee leaders in daily activity – by a small margin in the 116th Congress and a larger margin in the 117th Congress. It appears that the additional resources and power from leading a committee (or sitting as a ranking member) do not necessarily translate directly into more Twitter communication in this sample. This provides evidence of the negative for RQ2 – committee leaders do not tweet more than their peers. Without additional evidence, it's hard to say why exactly this is the case.

The two figures shown thus far demonstrate, at a cross-section, that party leaders are more communicative on Twitter than the whole of Congress and committee leaders are slightly less communicative than the whole of Congress. While this is useful as a benchmark, it leaves out the fact that these bar plots contain four years of data. The data here are captured between 2019 and 2023 meaning the daily average is aggregated over a presidential election, a change in congressional majority, and a midterm election. Thinking through how these patterns change over time and how each one of these typologies responds to political events is crucial to understanding whether or not these groups are meaningfully different from one another. To capture this, I calculated the daily average tweets for each day of this period and plotted them as a time series. The day-to-day difference in tweets has predictable variation and the overall pattern is quite noisy. To get around this, I plotted a locally estimated scatterplot smoothing line to show overall trends in the data. Additionally, to reduce the noise of daily differences in tweeting, this plot looks at the average weekly tweets for each group. The results are shown in Figure XX.

Across the entire four-year sample, the hierarchy of the groupings maintains – Tweeters tweet the most, closely followed by party leaders, with committee leaders and rank-and-file members lagging. Several interesting trends in activity are highlighted here. First, all groups appear to be moved by similar trends. This of course makes perfect sense as political communication is downstream of political events. Every group has peaks each year on the date of the State of the Union address. All groups have a period at the end of the year where their accounts become much less active as the public's attention to politics recedes. This provides helpful descriptive evidence to the underlying data generation process.

Second, though the groups are tethered to the same political events, the top groups act in different ways, but the bottom two groups remain steady. For example, we do see an overlap in activity between the top two groups, that is, in certain weeks party leadership is more active than Tweeters. Often they are very close in their overall output, particularly in 2019, but the trend shows that in the long run, the Tweeters are the most active. In contrast, the lower activity groups do not have these same changes. They ebb and flow with the political calendar, but committee leaders do not respond in a way that causes them to approach the output of the top two groups.

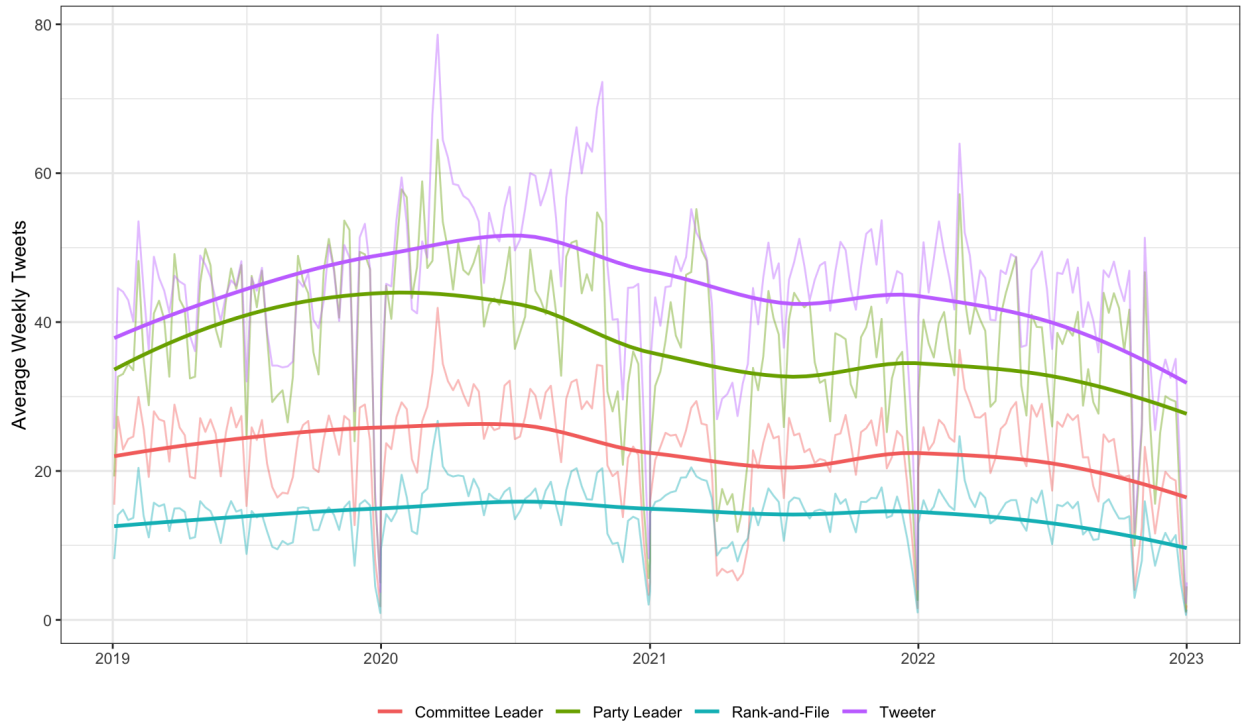


FIGURE XX: Average Weekly Tweets Per Group

A final step in understanding the differences in the groups, which appear to be stable across congresses, is to think about how partisan differences might be buried in the analysis above. Party leaders, and committee leaders for that matter, will likely respond differently in periods when they have control of Congress than they would during periods when they lack power. Additionally, it may be that Tweeters in the minority are much more active because their lack of control frees them to communicate negativity about those in control. To get at this, I use the same method above looking at weekly tweets overtime for the groups, this time breaking it down by the partisanship of the member tweeting. The results are shown in Figures XX and XX.

Figure XX shows the differences between the top two active groups, Tweeters and Party Leaders, broken down by party. There are clear differences in how the party leaders act during this period. During the 116th Congress, Democratic leaders out-tweet their Republican counterparts by two to three times. This gap narrows in the presidential election year of 2020 and then disappears almost completely for the majority of the 117th Congress. Past research has found that Democrats tweet more frequently than Republicans on average (Russell 2018), so Republican leaders pulling on par in activity in the 117th Congress indicates the party overcoming an existing partisan gap. The differences here could be due to several factors. First and foremost, during the 116th Congress, President Trump represented a partisan target for Democratic leadership who only had control of the House. During the 117th Congress, Democrats had control of both chambers and the presidency, so an increase in Republican

activity during this period may be related to interbranch conflict in the national media. Additionally, once Democrats have full control their party leadership begins communicating less, indicating there may be a communication and policy tradeoff when it comes to how resources are spent within Congress (Lee 2016).

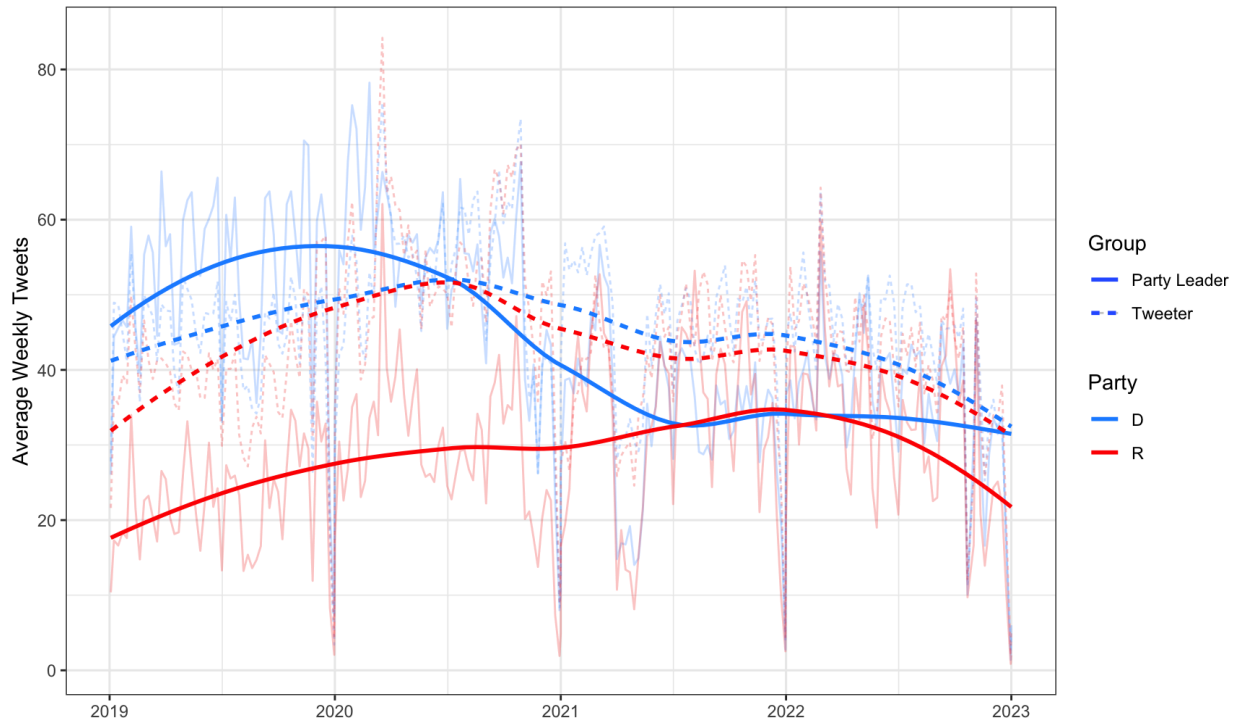


FIGURE XX: Partisan Breakdown of High Activity Groups

Interestingly, Tweeters do not experience this differentiation along partisan lines. For one, the partisan gap is extremely small, though persistent, at this level. Democratic Tweeters do tweet more than Republican Tweeters, but the gap remains small throughout. This group also seems to react less to the changes in Congress and instead displays similar levels of output through the entire four-year sample. Given the past research on the topic, it is quite astonishing that we do not see partisan differences in output, but rather we see evidence of a sustained commitment to hyper-communication at the top level, despite what is happening within the institutions of party and Congress.

Figure XX shows the same plot but for committee leaders and rank-and-file members. The relationship between these two groups tells a different story. While Republican committee leaders close the gap a bit with their Democratic colleagues in the 117th Congress, partisan differences within the groups are large and persistent across the sample. Additionally, the stratification between groups maintains for the majority of the two congresses considered. Similar to Tweeters, we see less of a response between both groups to changes in institutional

power and changes in the presidency, indicating that these MCs likely have a set communication strategy and don't change in the same way party leaders do.

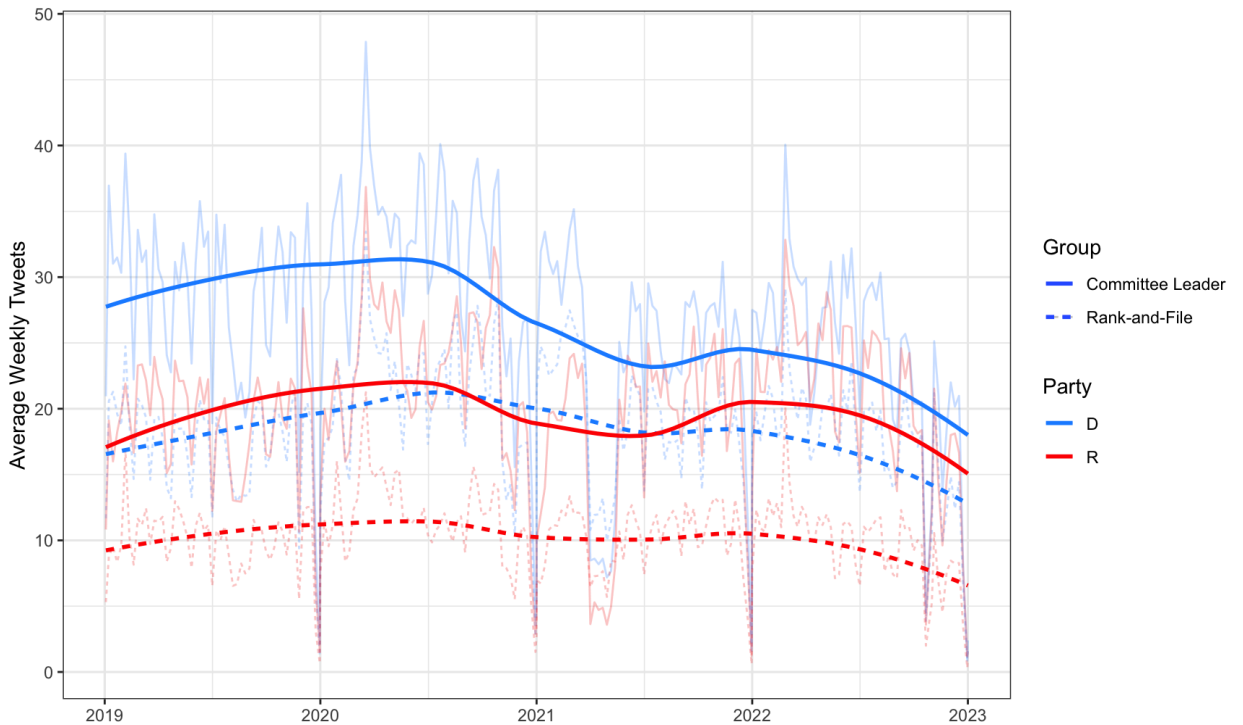


FIGURE XX: Partisan Breakdown of Low Activity Groups

### *Individual Characteristics*

Turning now to the degree to which individual characteristics, I begin with examining how member ideology impacts an MC level of Twitter activity. While there are a number of ways political scientists have measured ideology, a common way to do so, especially when looking at members of Congress, is to use the DW-NOMINATE score for each member (Lewis et al. 2023; Poole and Rosenthal 1985). This method scales each individual based on their roll call vote history within a single session of Congress. Figure XX shows a breakdown of members by their first-dimension DW-NOMINATE score, typically interpreted as the liberal-conservative dimension and the total number of tweets that members tweeted. Here, I have separated the two Congresses given that MCs change positions from session to session. A Poisson regression trendline is plotted within both parties to visualize the relationship between ideological extremity and Twitter activity.



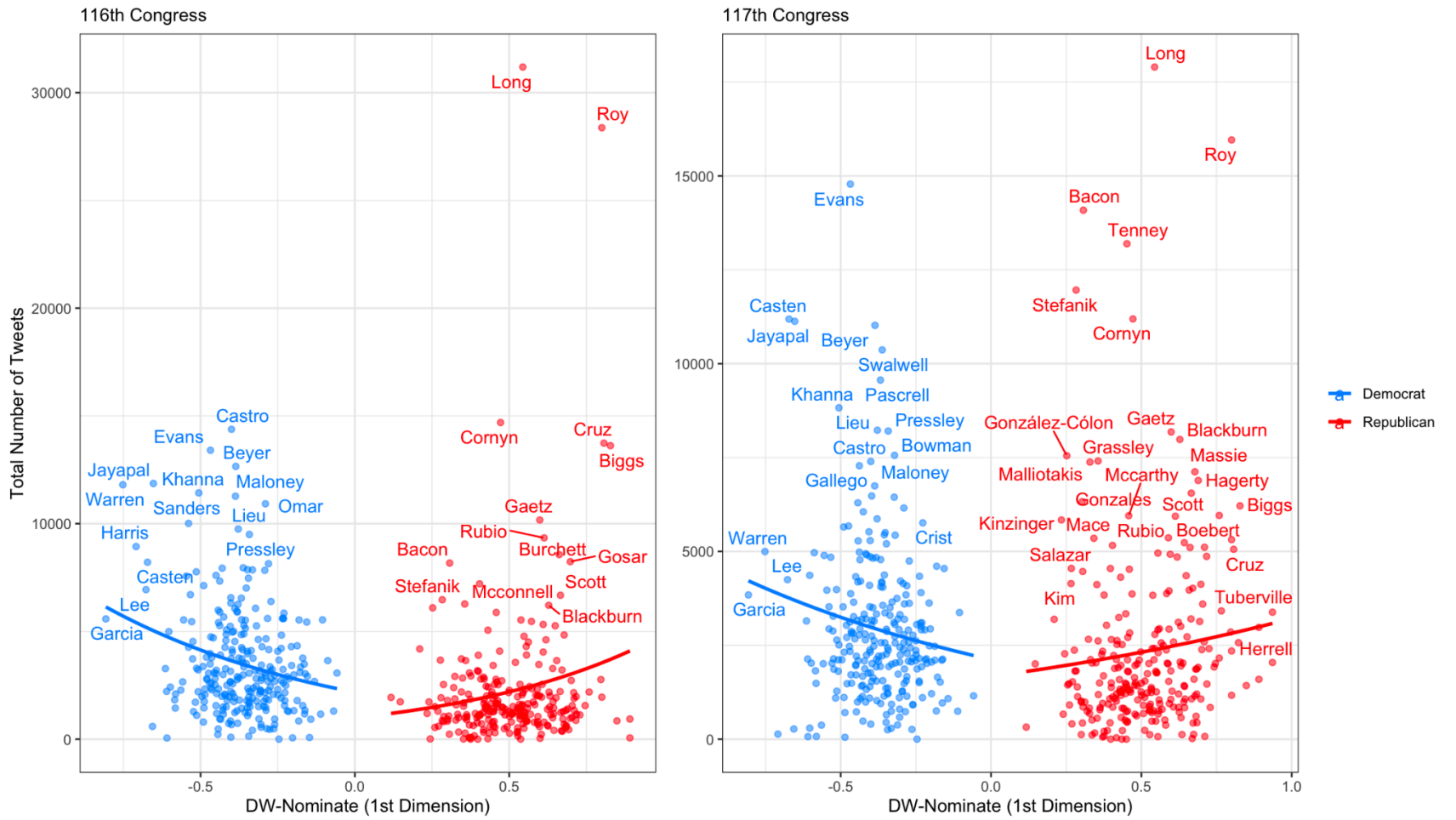


FIGURE XX: Member Ideology and Twitter Activity

In both Congresses, the more to their party's extreme an MC is the more likely they are to tweet frequently. In general, this backs up the idea that the content on Twitter is more extreme and is therefore not representative of Congress. This often gets brought up in the phrase "Twitter is not real life" and past work has shown that extreme members of the electorate are also more active on Twitter (Cohn and Quealy 2019). The direction of causality here though remains ambiguous. As Nguyen (2021) brings up, more extreme content garners more engagement leading to questions about the underlying mechanism. Extreme members are likely more suited to succeed on the platform in winning engagement, which might make Twitter a less effective means of communication for moderate members.

To expand on a central theme of this study, members who are ideologically at the edges of their party are not typically in positions of power within Congress. This means that they lack the internal controls on policy that some of their more moderate counterparts often have. This lack of control inside Congress may push these members to go public in an attempt to engage voters and the media with the long-term hope of shifting policy (Kernell 1997). The data does provide evidence in the affirmative for RQ3: ideology does seem related to Twitter activity, though the exact mechanism must be further examined to say precisely why this is the case.

Many other factors determine whether a member of Congress has a position of power within the institution. Given that Congress runs on seniority, serving longer in Congress is associated primarily with being a committee leader but also with being a party leader. This means new members of Congress have little institutional power and may be more inclined to turn to other methods in an attempt to push policy in their ideal direction. I look at this three ways: the seniority (number of terms served) of an MC, the age of the MC, and lastly, whether the MC has had experience within a state legislature. Figure XX-XX shows the results. Each plot shows the proportion of MCs in each group for the quantity of interest, making it easy to compare the compositions across differing levels of experience.

As expected, committee and party leaders make up the majority of MCs who have served between 15 and 25 terms<sup>4</sup>. In this same bracket of experience, only one MC, Fred Upton (R-MI) is a Tweeter, with the rest being Rank-and-File. The rest of the Tweeter group has all served under 15 terms and is best represented in members who are newest to Congress, here having served under 5 terms. Several things might be going on here. First, serving 15 terms places members in Congress well before Twitter was invented. Not only are these members more likely to be leaders by default, but they could simply have a more old-school approach to their jobs. There are also fewer members in each category as it increases given the average Congressional career is only around 10 years meaning the proportion of an individual member increases in the highest seniority groups (Manning 2022).

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<sup>4</sup> Terms are not comparable between chambers as term lengths differ, but this using term as a measure of seniority is common (Volden and Wiseman 2023). This measure includes the current term. The longest-serving member in the data, Don Young (R-AK), served for 49 which is represented as 25 House terms.

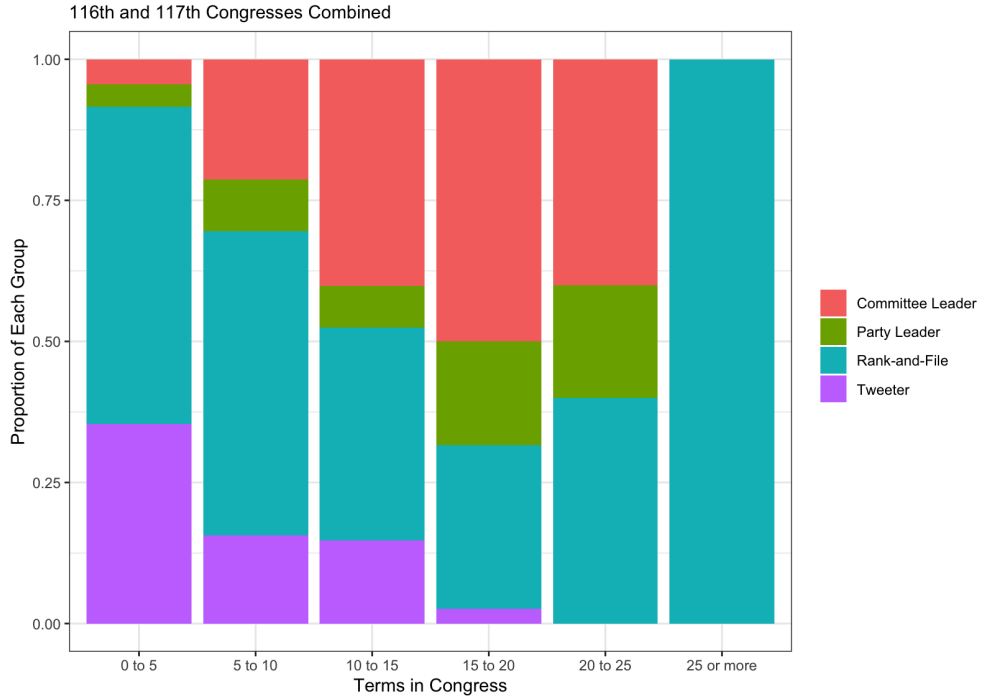


FIGURE XX: Seniority and Twitter Activity

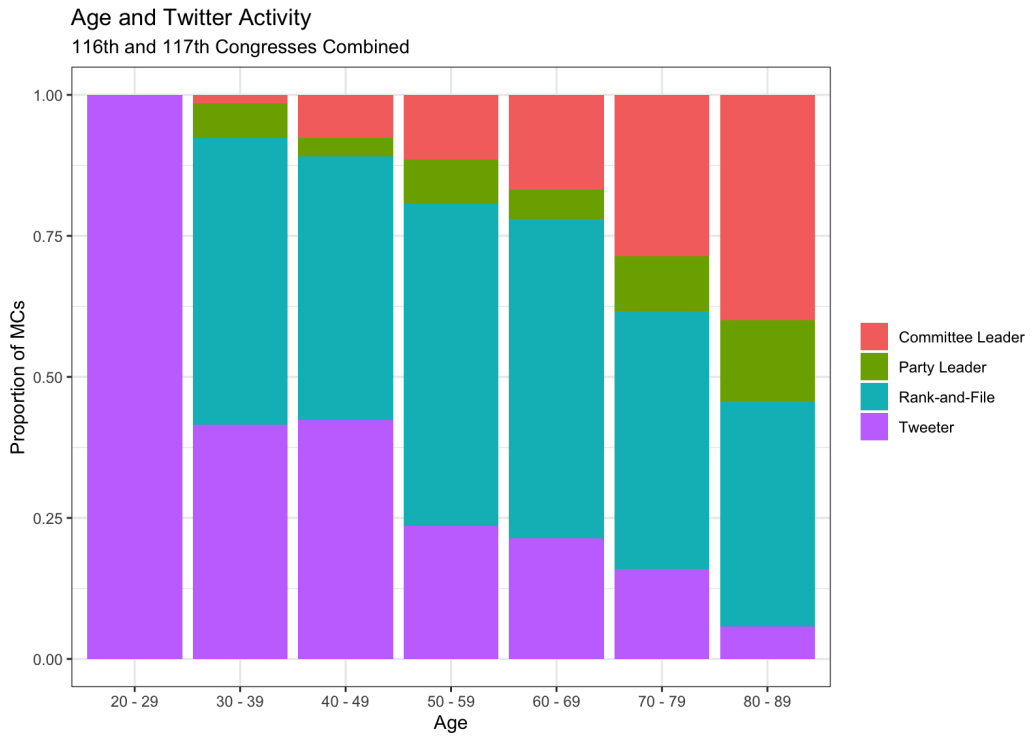


FIGURE XX: Age and Twitter Activity

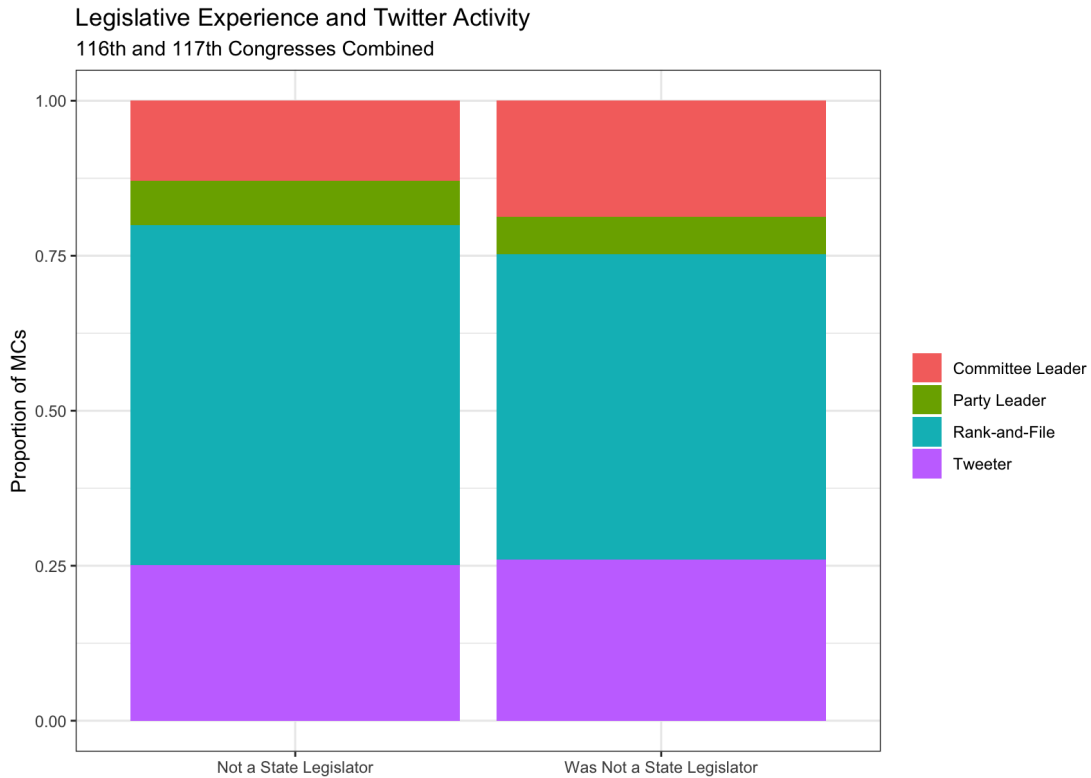


FIGURE XX: Legislative Experience and Twitter Activity

Figure XX shows the same analysis but this time using the member’s age rather than their seniority. A similar pattern, but a stronger pattern emerges. As an MC gets older, the likelihood of being in a position of leadership increases. Conversely, the younger an MC is, the more likely they are to be a Tweeter. Across the age groups, the proportion of rank-and-file members stays relatively constant. This points toward something of a tradeoff between being a Tweeter and being a leader, where older members are naturally folded into leadership and younger members – perhaps out of comfortability with technology, perhaps for strategic reasons – turn to higher Twitter activity.

Finally, Figure XX shows the breakdown of the groups by prior state legislative experience. The proportions between those with and without legislative experience are almost identical, indicating that there is likely little learned via past legislative experience that influences Twitter activity at a Congressional level. This would point toward the decisions about Twitter activity being based not necessarily on being an outsider to politics (i.e. someone who lacks past legislative experience) but rather on being an outsider to the institution of Congress. Tied together with the two plots above, there is support in the affirmative to RQ4. Tweepers are younger and have less seniority than their counterparts in leadership positions, but this difference in digital strategy is not explained by their past experience. Perhaps here a measure of ambition

might explain why some young and inexperienced MCs turn to Twitter and why some prefer to remain in the rank-and-file.

Finally, I want to turn to demographic differences and Twitter activity. Past work has demonstrated that female MCs tweet more than their male counterparts (H. K. Evans and Clark 2016). Additionally, scholars have shown that MCs from racial minorities often engage with topics that are seen as racially valenced (Dancey and Masand 2019; Tillery 2021), which may not necessarily translate into being high-activity users. Given Congress' history of being an institution run by white men, it is very possible that as with the power imbalances above, women and MCs of color might turn to Twitter to get around the institution's power center. Figures XX and XX show the group breakdowns by demographic variables.

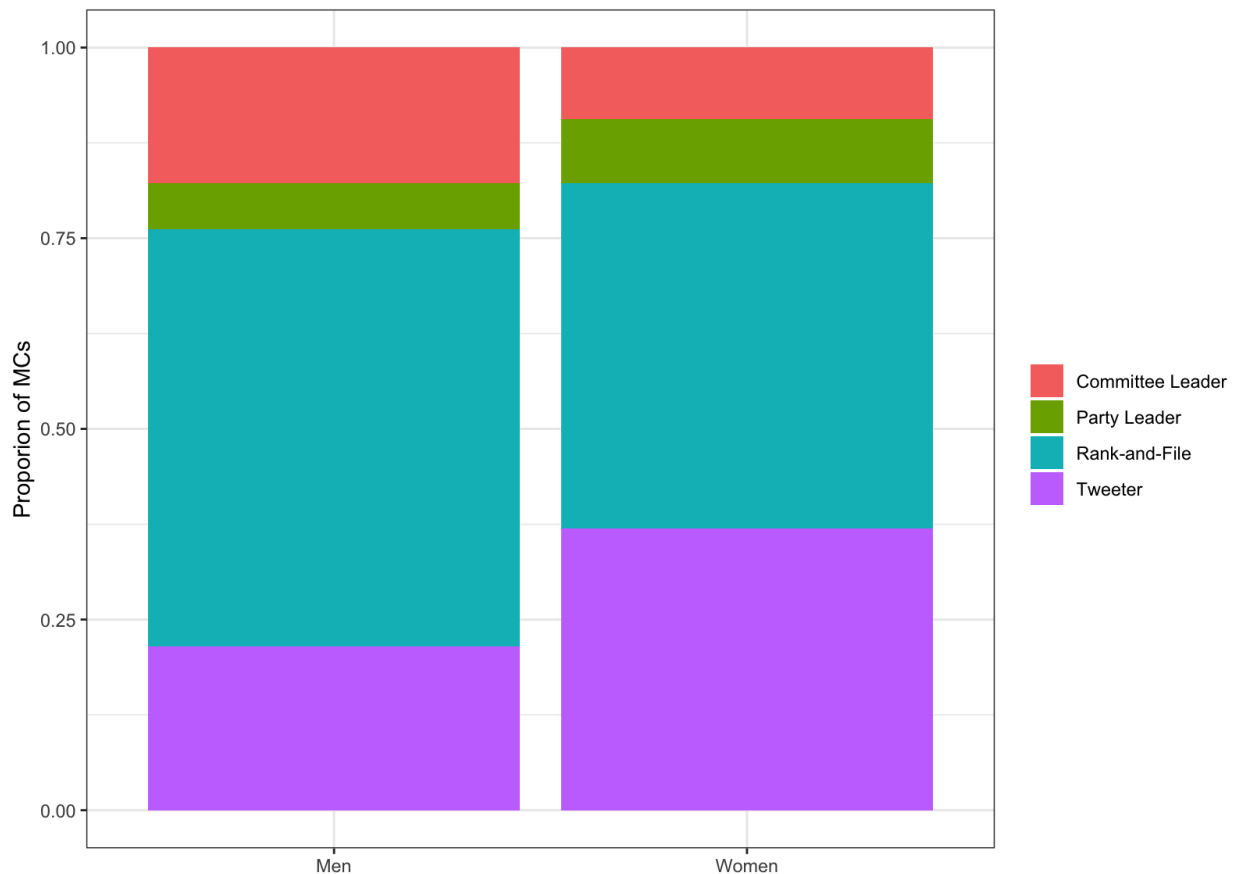
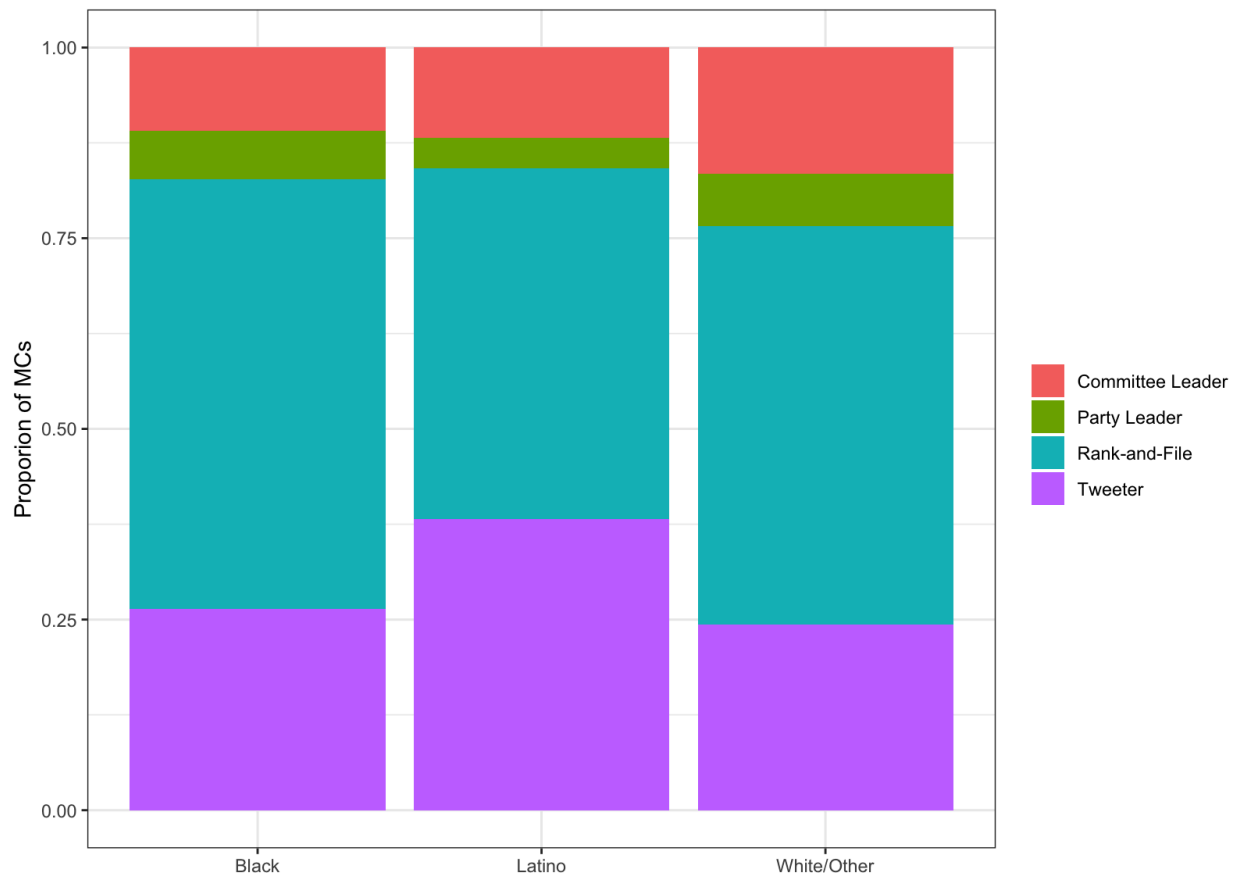


FIGURE XX: Gender and Twitter Activity

A greater proportion of men are in positions of leadership in general, though women have a slightly larger share of the party leadership than men. The disparity seems to be made up by a larger share of women being in the Tweeter category than their male counterparts, agreeing with

earlier work that found similar gender disparities. Figure XX shows the same breakdown for race.



**FIGURE XX: Race and Twitter Activity**

## Topics

The heatmap shown in Figure XX displays labels for the ten topics discovered from the LDA model and the percentage of tweets from each group about that topic. Tiles shown in yellow indicate high usage of the topic among that group. Each group has a different repertoire of topics that they typically highlight. Tweeters were most active on the topic of elections, whereas party leaders were most active on the topic of the economy. Committee leaders were most likely to tweet about Trump/Biden, a partisan-coded topic, largely driven by Donald Trump's two impeachment hearings. Perhaps unsurprisingly, rank-and-file members focus on constituent messaging the most. All four groups talked about the border the least.

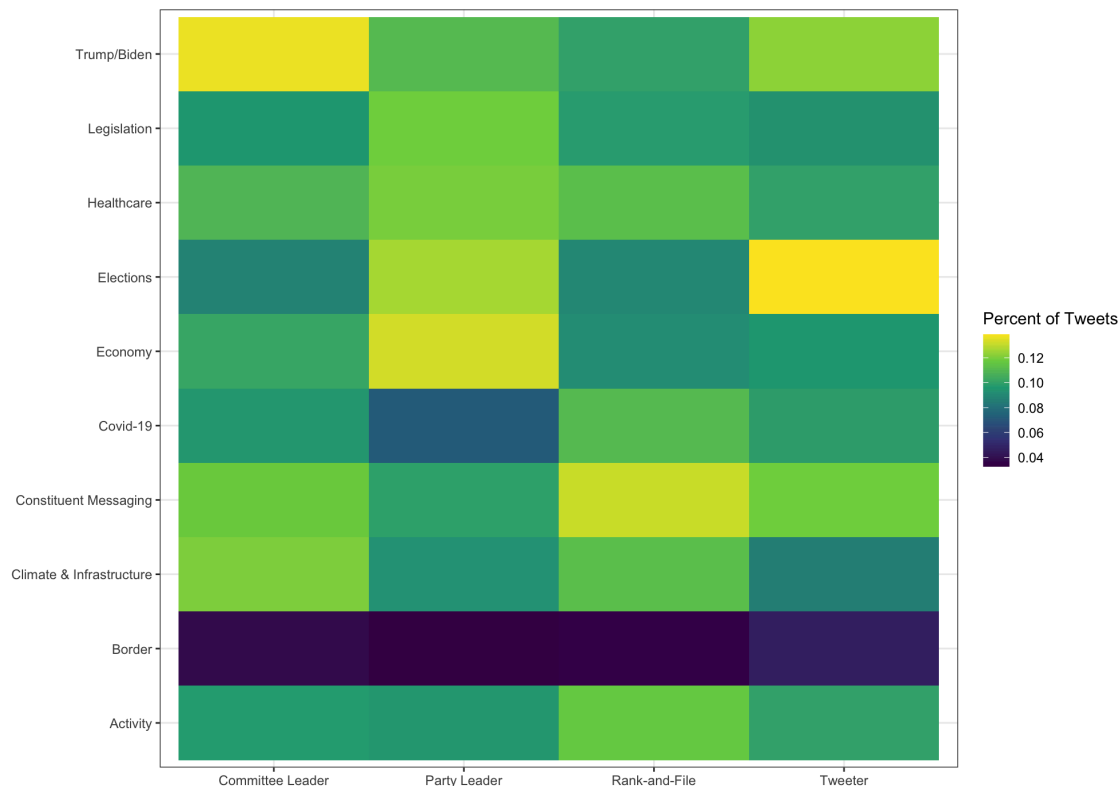


FIGURE XX: Heatmap of Topics

The heatmap above provides critical evidence that the four groups do not simply follow one another in terms of their messaging. Instead, each group talks about the topics that are most relevant to their interests and motivations in Congress at the time. To further explore this, Figure XX shows the percent of tweets on each topic for Tweeters and leaders. What this shows us is that for many topics, these two groups tweet very similarly. On the issues of Trump and Biden, Infrastructure and Climate, and updating followers on their daily activities, the groups are almost identical. On other topics, one groups clearly tweets about the topic more. For example, Tweeters do much more constituent service in their tweets while party leaders focus much more on the economy. Additionally, it appears that for Covid-19, Tweeters were much more likely to frame

their tweets in the language of the pandemic, whereas party leaders were more likely to tie this into healthcare. Lastly, the frequency for each topic seems to respond to the same underlying process and effects both groups similarly. We do not see differential changes in topic frequency, rather both groups tend to increase and decrease frequency together.



FIGURE XX: Topic Frequencies for Tweeters and Leaders

Turning now to the sentiment of the tweeters, Figure XX shows the percent of positive and negative words used in tweets across the four years. First, both Tweeters and Leaders use similar rates of positive and negative words. Positive words make up around 10% of words used by both groups and negative words make up around 5% of words. Second, this pattern is remarkably consistent across a large period. Figure XX shows the results for subjectivity. Across the entire four-year period, party leaders use more subjective words, that is words coded as positive or negative by the LSD, than Tweeters.



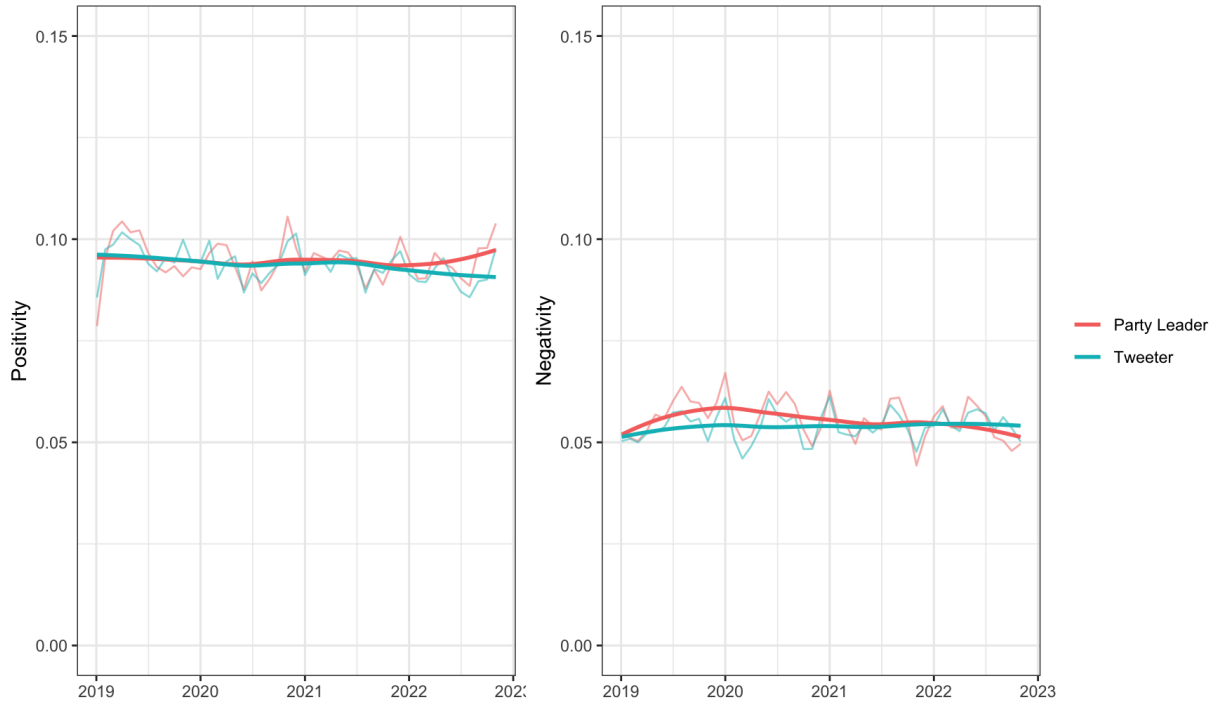


FIGURE XX: Positivity and Negativity in Congressional Tweets

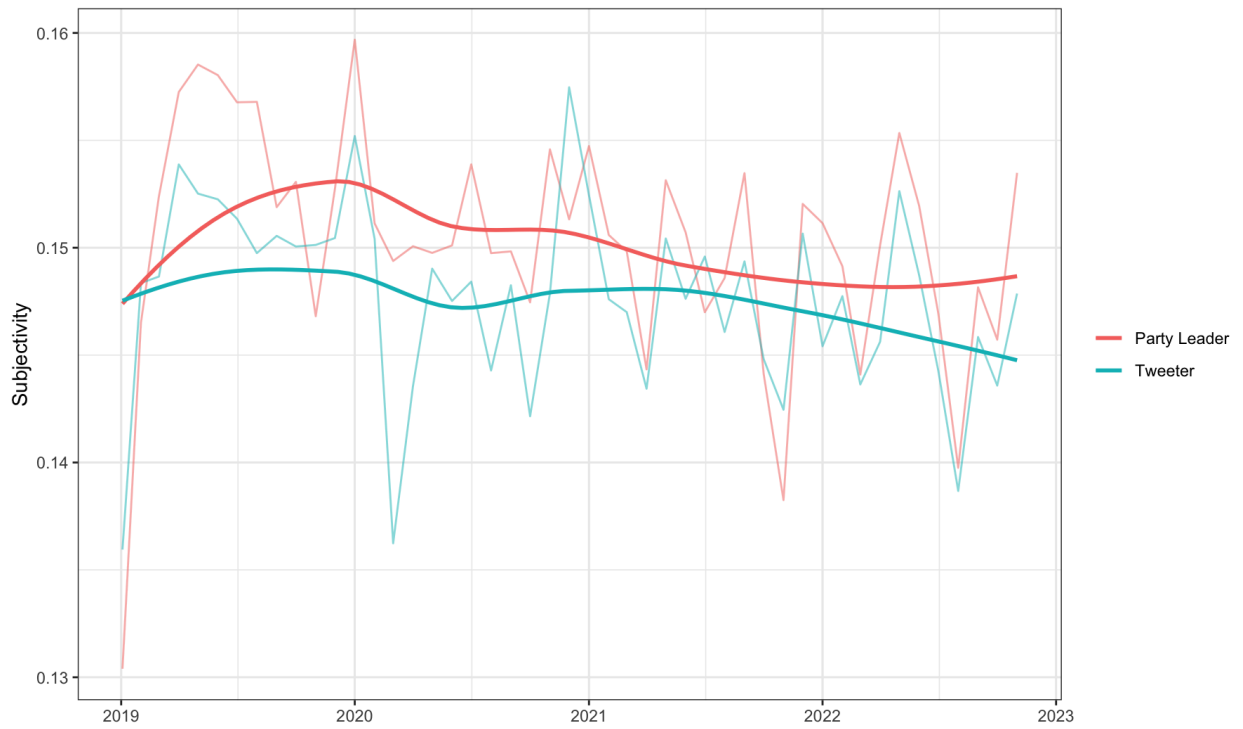


FIGURE XX: Subjectivity in Congressional Tweets

## Conclusion

This paper set out to explore an understudied element of digital communication in Congress – frequency of communication. Party leadership within Congress is associated with greater communication on Twitter. Despite the additional boost in resources, their committee leadership counterparts do not communicate at the same rates. Additionally, the members who are outside of power in Congress, and who are more ideologically extreme, communicate with greater frequency online than their more moderate counterparts. These members communicate on average as frequently as their party leaders and often follow the same patterns of communication.

These results have important implications for our understanding of Congress. First, the findings here back up the common perception that Twitter is a highly partisan space. In this case, but give this perception additional clarity. The most active accounts are party leaders and those more likely to be ideologically extreme. The most common messages on Twitter are those from party elites and party extremes, giving the public a distorted view of what Congress might be like on the ground level. Many of the committee leaders and the kinds of members who may be great constituent servants are likely not seen in the avalanche of tweets from their colleagues.

Second, it helps shine a light on which members, when lacking institutional power, turn to Twitter to communicate. These members are more extreme ideologically and newer to Congress, but not necessarily safer or up for reelection, indicating that their motives are likely driven by their brand of representation rather than electoral pressures. Further work should continue to explore how these members compare to their colleagues and get a sense of whether their frequent communication is limited to just Twitter, or if they prefer to communicate across all channels at a higher frequency.

Finally, the results show that Tweepers communicate very similarly to Leaders in terms of frequency and pattern. While there is much more to be explored here, the similarity in output despite the differences in resources remains important. The Tweepers highlighted above manage to punch above their weight, at least in frequency, and keep pace with party leaders with many more resources. Additionally, they are quite similar in the sentiment of their tweets but differ when it comes to the kinds of things that they talk about.

This paper is not without its limitations. The method by which MCs were grouped together is quite rudimentary and a more sophisticated approach might be called for moving forward. Additionally, the data contains some extreme outliers, making modeling a bit challenging. Different approaches to estimating how these variables help explain communication frequency should be explored. Lastly, the most important part of a tweet is what is communicated, not just that it happened. Future work should leverage the wealth of data

contained within these tweets to better understand how the frequency of communication impacts the quality of communication.

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