Gendered Rhetoric: Femininity, Masculinity, and the Influence of Candidate Gender on Discussions of Gendered Topics on Twitter

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This thesis is submitted in fulfillment of

Bachelor of Arts Degree
Department of Political Science with Distinction
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Spring 2021

Abstract

Social and legal history in the U.S. have associated women with homemaking and men with breadwinning. Consequently, Americans equate femininity and masculinity with the competencies required of homemakers and breadwinners, respectively. Femininity implies competency on women's rights, education, healthcare, and familycare, whereas masculinity implies competency on the military, economics, foreign policy, and policing. Americans further view politics, especially Republican politics, as masculine. These stereotypes imply differences in the rhetorical strategies of male and female political candidates. Using a novel dataset of 698,609 tweets posted across 2,092 major-party House congressional campaigns in the years prior to the 2018 and 2020 elections, I find that a candidate's gender determines the gendered topics they discuss, a candidate's gender does not determine the engagement they receive on tweets discussing gendered topics, and the COVID-19 pandemic and the 2020 Black Lives Matter protests changed the relationship between candidate party and gendered topic discussion.

Keywords

Gender, stereotypes, campaign, rhetoric, Twitter, elections, Dawn, Teele

Disciplines

Political Science | Women's Studies | American Elections | Communications

Acknowledgements

This thesis would never have been possible without the support of an incredibly knowledgeable and generous group of individuals.

I would first like to thank my research advisor, Dr. Dawn Teele. I was honored when Dr. Teele agreed to sponsor my honors research, and I am indebted to her for her willingness to give me detailed feedback, even over the summer and during the busiest parts of the academic year. Her wealth of knowledge on women in politics paired with her thoughtfulness and clarity of vision for this paper have made writing it incredibly rewarding.

I would also like to extend my gratitude to Dr. Eileen Doherty-Sil. Her facilitation of an honors thesis class in the fall introduced me to the village of political science students and professors who would help me on this journey. Her guidance in the past year and throughout my time at Penn has consistently left me inspired and confident in my ability to conquer any challenges I might face.

I would also like to thank the community of professors and students from Penn's Center for Undergraduate Research Fellowships for their detailed feedback on early drafts of this work, subject specialists and librarians from Penn Libraries for their help in data collection, Dr. Marc Meredith for equipping me with the statistical tools to analyze my data, and Dr. Jamil Scott from Georgetown University for her guidance in text processing.

Of course, I would not have made it through this year without the emotional and material support of my family and friends. I want to thank Zach, for always cheering me up and cheering me on, and for his willingness to share his knowledge of Python. I also want to thank Chloé for reminding me what I'm capable of even in the small hours of the morning, and for coming with me on this journey to graduate in three years while still writing an honors thesis. Finally, I want to thank my parents. I wouldn't be at Penn were it not for their encouragement and support. Their faith in me has kept me committed to this thesis and to my intellectual journey overall.

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I. INTRODUCTION

The Problem at Hand

Just over a century has passed since women were granted the right to vote in the United States. Despite the progress that has been made since this historic declaration of de jure gender equality, American women remain underrepresented in government. The Center for American Women in Politics reports that, as of January 2021, women make up just 26.7% of Congress, with 24 women in the Senate and 119 women (out of 435 total representatives) in the House of Representatives. Women make up only 18% of State Governors, 30.9% of state legislators, and 23.3% of mayors of cities with populations over 30,000 ("Current Numbers" 2021).

The underrepresentation of women in American government contributes to their societal inequality (Campbell, Childs, and Lovenduski 2010; Escobar-Lemmon and Taylor-Robinson 2014; Mansbridge, 1999; Mendelberg, Karpowitz, and Geodert 2013). Considering that American men and women receive higher education in political fields and occupy careers that feed into candidacy such as law, business, education, and political advocacy at similar levels (Lawless and Fox 2004), this inequality further amounts to a subversion of American meritocracy and a depreciation of American governmental effectiveness (Baltrunaite et al. 2014; Franceschet, Krook, and Piscopo 2012; Murray 2014).

Voters do not prefer male candidates over equally situated female candidates in American elections, and women's aversion to candidacy is the commonly accepted cause for their underrepresentation in government (Lawless and Fox 2004; 2005; 2010; 2014). This does not imply, however, that men and women have equal experiences on the campaign trail. In fact, women's aversion to candidacy seems due, at least in part, to their understanding that their campaigns will be evaluated differently than men's campaigns as a result of gender stereotypes.

Thus, an examination of women's navigation of certain gender stereotypes on the campaign trail and voter reactions to such navigation may help to clarify the cause for women's aversion to candidacy.

Working Towards a Solution

In this paper, I focus my attention on a single gender stereotype that candidates face: the stereotype that men are competent in masculine issues and women are competent in feminine issues. Social and legal history in the U.S. have associated women with homemaking and men with breadwinning. Consequently, Americans equate femininity and masculinity with the competencies required of homemakers and breadwinners, respectively. Femininity implies competency on women's rights, education, healthcare, and familycare, whereas masculinity implies competency on the military, economics, foreign policy, and policing. These gender stereotypes imply that male and female candidates may stress their competency in their respective topics in order to appeal to voter expectations of their gender. The common conception of the Republican party and politics in general as masculine, along with the ever-shifting political priorities of the American public, may alter trends in candidate rhetoric in conjunction with gender stereotypes.

Using a novel dataset of 698,609 tweets posted across 2,092 major-party House congressional campaigns in the years prior to the 2018 and 2020 elections, I find that a candidate's gender correlates with the gendered topics they discuss on Twitter, a candidate's gender does not correlate with the engagement they receive on tweets discussing gendered topics, and the COVID-19 pandemic and the Black Lives Matter movement changed the relationship between candidate party and gendered topic discussion on Twitter in 2020.

In Section II, I introduce the literature on gendered rhetoric, including a discussion of the psychological and historical reasoning behind stereotypes against female candidates, as well an

exploration of the effects of these stereotypes on women's experiences as candidates. In Section III, I explain my processes for data collection, along with my plans for analysis and the significance of my dataset. Section IV outlines my findings for 2018 and 2020 and discusses each of my regressions in depth. This section also includes a discussion of the limitations of this study and a description of my ideas for future research on this topic. Section V offers concluding remarks on my study, and Sections VI and VII cover my appendices and references, respectively.

II. LITERATURE REVIEW

a. Theoretical Frameworks of Gender Stereotyping in Politics

Human psychology provides a foundation for my discussion of stereotyping in American political campaigns. As complex social beings, humans simply do not have the cognitive resources necessary to view every single new encounter as unique (Bodenhausen and Wyer 1985; Fiske and Neuberg 1990). In order to preserve energy, humans have evolved to draw inferences about others based on our past experiences with members from what we perceive to be their same group. These inferences have been referred to as "stereotyping" since 1922, when Walter Lippman first referred to them as such (Lippmann 1922). With this psychological understanding of stereotyping in mind, there are several theories which use the historical legal and social status of men and women to predict modern gender stereotypes.

Firstly, role congruity theory¹ predicts that women will be seen as more qualified than men to address the domestic issues which they have been legally and socially limited to throughout history but will be seen as less qualified than men to address non-domestic issues which they have been legally and socially excluded from (Eagly and Karau 2002; Koenig and Eagly 2014). Studies testing the effects of role congruity in political elections have clarified that voters tend to assume that female candidates possess stereotypically feminine personality traits such as compassion and empathy, while male candidates possess stereotypically masculine personality traits such as agency and confidence.² Similarly, voters assume that female candidates are more credible when discussing feminine topics such as women's rights, education, familycare, healthcare, and welfare

¹ Role congruity theory is also commonly referred to as social role theory of prejudice.

² See Appendix A1 for a more complete list of gendered personality traits.

because these topics are related to homemaking. Voters assume that men, on the other hand, are more credible when discussing masculine topics such as war, crime, foreign affairs, and the economy, because these topics are more related to breadwinning (Bem 1974; Greenwald and Lehman-Zilwig 2017; Herrnson and Stokes 2003; Huddy and Terkildsen 1993a).³

Secondly, feminine and masculine stereotypes have been shown to bleed into voters' assessments of partisanship. During the past three decades, the economic and military policies of the Republican Party have caused it to be associated with masculinity. On the contrary, the welfare and identity policies of the Democratic Party have caused it to be associated with femininity during roughly the same timeframe (Winter 2010). In conjunction with this gendered partisan divide, women are often stereotyped to be more liberal than they actually are (Alexander and Anderson 1993; Huddy and Terkildsen 1993a; King and Matland 1999; Koch 2000; Koch 2002; McDermott 1998).

Lastly, the overwhelming majority of men in politics throughout American history has caused voters to associate politics in general with masculinity. The highest offices of American government, which have proven the most difficult for women to reach, are considered the most masculine of all, most likely as a result of the absence of women role-models filling those offices (Huddy and Terkildsen 1993b).

b. Gender Stereotyping: Help or Hindrance?

This combination of stereotypes begs the question, are these stereotypical expectations of candidate's competencies a help or a hindrance to women's political campaigns? Based on the

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³ See Appendix A2 for a more complete list of gendered topic competencies.

literature outlined below, I argue that women's candidacies are hurt, albeit not irreparably, by the combination of gender stereotypes described above.

It seems that association of women with femininity contrasted with the association of politics with masculinity is a hindrance to women's political success. American voters claim that they value masculine and feminine rhetoric equally. In 2019, American voters reported that women and men's leadership abilities inherently vary, but further reported that neither men nor women's leadership was superior when it comes to government leadership (Horowitz, Igielnik, and Parker). More objective research, however, has shown that voters focus mainly on masculine rhetoric when evaluating candidates. Voters view masculine characteristics and topic proficiencies as increasingly important at higher levels of government office, but they do not see feminine characteristics or topic proficiencies as either liabilities for candidates pursuing higher office or assets in candidates for local office (Dittmar 2016; Dolan and Lynch 2014; Huddy and Terkildsen 1993b). It also appears that women's association with liberalism is a hindrance to their electoral success. This persistent association of women with liberalism has been shown to hinder both Republican and Democratic women, depending on shifting preferences for candidate polarization (Alexander and Anderson 1993; Huddy and Terkildsen 1993a; King and Matland 1999; Koch 2000; Koch 2002; McDermott 1998).

c. Case Studies of Candidate Strategies

If stereotypes are a hindrance to women's political success, how do women address these stereotypical expectations during their campaigns in a way that equalizes their likelihood of being elected compared to similarly situated male candidates? Based on the following case studies of Hillary Clinton and Sarah Palin, I argue that women gain the most political support by complying

with traditional gender norms and discussing feminine topics, even across changes in political context and political party which might warrant a focus on masculine topics.

Case Study 1: Hillary Clinton

In 2016, Hillary Clinton was the first woman in American history to receive a nomination for president of the United States from a major political party. Clinton's experiences in crafting campaign rhetoric go back much further, however. A brief examination of the early criticism Clinton received for masculine rhetoric and later transition to feminine rhetoric in her various campaign efforts from 1992 to 2016 provides insight into the doubly-binding nature of feminine and masculine rhetorical standards in American politics, and suggests that women are most successful when they associate themselves with femininity even in the presence of masculine crises.

In January of 1992, the middle of Bill Clinton's presidential campaign, a story leaked about Bill's 12-year extramarital affair with state employee, Gennifer Flowers. When an interviewer suggested that her staying with her husband was an act of passive acceptance, Hillary responded:

"You know, I'm not sitting here as some little woman standing by my man like Tammy Wynette. I'm sitting here because I love him, and I respect him and I honor what he's been through and what we've been through together" (Schnoeblen 2010).

Here, Clinton contrasts herself with a prominent feminine stereotype of the time—popularized by Wynette's song, *Stand by Your Man*— that good wives passively accommodated their husbands' faults. Clinton condescendingly categorized this type of wife as a "little woman," and contrasted such with wives like herself who "love," "respect," and "honor" their husbands (Spring 2016). This choice could be portrayed as a rejection of femininity. Clinton did not, however, associate herself with masculinity through this statement. Thus, this rhetoric seems to amount to a redefinition and legitimization of femininity. Working within the confines of femininity in this

way earned Hillary the title of "Bill's greatest asset." She was said to have "stripped the poison petals off Gennifer Flowers's story" (Goodman 1992).

This rhetorical example is contrasted with another from the same year in which Clinton was chastised for her alleged rejection of stereotypical femininity. In response to accusations that Bill was funneling money into her law firm, Hillary stated the following:

"I suppose I could have stayed home, baked cookies and had teas, but what I decided to do was fulfill my profession... You know, the work that I've done as a professional, as a public advocate has been aimed in part to assure that women can make the choice that they should make, whether it's full-time career, full-time motherhood, some combination" (Goodman 1992).

The first half of this quote was repeated out of context to the point of, as one 1992 article from the Washington Post put it, placing Clinton "in the middle of the great American mommy wars" (Goodman). While Clinton framed her pursuit of a career in terms of women's rights, the public caricaturized and criticized Clinton's rejection of traditional femininity. Considering the previous example, it appears that the American public in the 1990's was not accepting of rhetoric which distanced women from stereotypical expectations.

In her 2008 presidential campaign, Clinton assumed a primarily masculine image in the eyes of the public. While masculine issues like the Iraq war seemed most important to voters at the time, researchers have attributed Clinton's focus on the Iraq war and lack of specific policy vision on women's rights and education to the gendered criticism she faced from the public. As one researcher summarized in 2010,

"Clinton, throughout her campaign rhetoric, was consistent in demonstrating her ability to deal effectively with masculine issues, in presenting masculine traits to voters, such as strength and toughness and a reliance on her past successes in politics, and in campaigning confidently amongst her male opponents. On the other hand, Clinton arguably erred on the side of presenting herself in too masculine a light, neglecting the public perceptions that she was too private, lacking warmth, and unlikable" (Schnoeblen).

Role congruity theory suggests that women are expected to be feminine in terms of their traits and topic competencies, but the importance of war in 2008 led Clinton to discuss masculine topics with a gusto that would be criticized by political commentators for many years to come. In navigating this double bind in 2008, Clinton was criticized by the American public for her rejection of femininity.

Perhaps because of this criticism, Clinton took a different approach in her 2016 campaign. As explained by researchers Greenwald and Lehman-Zilwig in 2017,

"[Clinton's] 2016 campaign did more to feature her female sex as an asset, and not a deficit, and she invoked a more feminist ideology on the campaign trail. She consistently reminded voters that she was a loving grandmother and her campaign's "stronger together" slogan conveyed a feminine sentiment."

Rather than resulting in increased support for Clinton, this association with femininity after accusations of masculinity in 2008 contributed to decreases Clinton's perceived authenticity (Enli 2017). Many voters continued to characterize Clinton as masculine, and those who characterized her as masculine had lower levels of support for her campaign (Conroy Martin and Nalder 2020).

From this brief examination of Hillary Clinton's campaign rhetoric, it becomes apparent that women in politics can face long-term negative repercussions for rejecting femininity or for appearing masculine, even when masculine topics are the topics du jour.

Case Study 2: Sarah Palin

"...it caused such a splash when Clinton once told a crowd, "I'm your girl"—there is little that's girly about Hillary Clinton's public persona. Palin calls herself a "gal" and it's utterly believable."

— LIBBY COPELAND, Washington Post Staff Writer (2008)

From Mayor of Wasilla, to Governor of Alaska, to nominee for Vice Presidential of the United States, Sarah Palin has been a conservative political candidate many times. Her 2008 Vice-Presidential campaign, however, was particularly crucial in defining conservative feminism.

Considering the association of the Republican Party with masculinity, the very task of doing so seems paradoxical. An examination of Palin's 2008 campaign rhetoric and the subsequent rise of so-called "mama grizzlies" and "frontier feminists" will help to clarify theories about gendered rhetoric and partisanship, and shows that expressions of femininity are preferred in conservative female candidates as well as liberal ones.

In her book, *America by Heart*, Sarah Palin used the mythology of the American frontier to draw herself as a "mama grizzly," or a self-sufficient, fiercely maternal woman (Gibson and Heyse 2014; Palin 2010). This phrase showcased Palin's masculine personality traits, while acknowledging her credibility on feminine topics such as familycare. While the Republican party is traditionally seen as the more masculine of the two major parties, it was Palin's pairing of masculinity to femininity which made her book a best-seller and popularized the conservative feminist movement.

Palin's delivery on the debate stage also highlighted her femininity. Even in her discussions of topics like the economy and infrastructure in debates, Palin displayed her hyper-feminine traits via exaggerated facial expressions, changes in tone of voice, and Palin's "sing-songy," "folksy" dialect. One Republican speechwriter praised Palin's approachable, likeable debate style as "Gidget goes to Washington" (Copeland 2008). With the fictional character's name being a combination of the words girl and midget, Palin was quite explicitly praised for acting like a little girl. One 2008 reporter explained, "Palin gets to be as nakedly political as any other candidate while being shielded from retaliation because of the perception that she is, after all, just a gal" (Copeland).

The pattern illustrated by these two case studies seems to clarify that female candidates are praised most highly for their femininity. This implies that, even across parties and political

contexts, female candidates will be pressured to express femininity in their personality traits and in their discussions of gendered topics.

d. Summary of Existing Literature

Research on gendered rhetoric thus far indicates that gendered stereotypes are an extension of men and women's historic roles in society. Women are stereotyped to possess feminine personality traits and competency in feminine issues. By contrast, men are stereotyped to possess masculine personality traits and competency in masculine issues. Furthermore, the Republican party and politics in general are said to be masculine in nature. I argue that stereotypes ultimately pose a unique challenge to be navigated by female candidates. I further assert, based on qualitative examination of prominent female politicians' campaigns, that women's expressions of femininity on the campaign trail are preferred by voters and can therefore help women to overcome the challenges posed to them by traditional gender stereotypes.

Existing literature relies heavily on qualitative methodology to explore trends in candidates' gendered rhetoric and voter evaluations of such. While testimonial evidence and case studies have been an excellent source for developing theories of gendered rhetorical trends, they may not be appropriate to extrapolate from in predicting overall trends in American politics. Firstly, qualitative accounts of campaigns often rely on media coverage, which tends to exaggerate rhetorical trends as in the case of Hillary Clinton's 1992 ordeal. Secondly, using media coverage as data often limits coverage to high profile campaigns (Huddy and Terkildsen 1993b). While it is predicted that high profile cases discussed above may set the tone for lower-profile elections, this statement will remain an assumption until an examination of lower-profile campaigns is conducted (Maurer and Diehl 2020). Luckily, the recent emergence of social media as a permanent record-

keeper for campaign rhetorical decisions and voter responses to such, even at lower levels of office, provides ample evidence around which to conduct such an examination.

III. METHODOLOGY

a. Tweet Collection and Processing

The following will briefly describe the process for collecting and processing the Twitter data used in this study. Please see Appendix B for access to these datasets along with the relevant Python and R scripts used to make and analyze them. These have been made available via GitHub.

Candidate and Demographics Data Collection

The first step in data collection was to gather demographics data on each candidate. Candidate data was extracted via web scraping from the elections tracking website, Ballotpedia. Founded in 2007, Ballotpedia is a nonpartisan encyclopedia for campaigns at all levels of American politics. Each election cycle, candidates submit autobiographies to be published on Ballotpedia, which can include links to up to three Twitter accounts connected to the candidate. If these accounts exist, they are marked as either "personal," "campaign," or "official." Personal accounts are those created by the candidate before their campaign began, campaign accounts are those created for the campaign, and official accounts are those created by incumbents during their time in office. In addition to Twitter handles, the pronouns that each candidate used in their Ballotpedia bios were collected and used to indicate candidate gender. For the purposes of this study, candidates who used he/him/his pronouns were marked male, candidates who used she/her/hers pronouns were marked female, and candidates who used they/them/theirs pronouns were marked non-binary. Ultimately, only two candidates with a Twitter presence used they/them/theirs pronouns. The low frequency of this type of candidate made data collection on them ungeneralizable, so their accounts were excluded from my final data analysis. Other control variables collected from Ballotpedia included candidate party and whether the candidate was an incumbent.

Tweet Collection

The second step in data collection was to pass the account names gathered from Ballotpedia to the Twitter application processing interface (API). I used the Twitter API to collect every tweet posted by any account from any candidate. Tweets were collected from the period of one year preceding both the elections to be examined: from 6 November 2017 to 6 November 2018 for 2018 candidates and from 3 November 2019 to 3 November 2020 for 2020 candidates. Interaction with the Twitter API required creation of a Twitter Developer Account, which I applied for using my credentials as a student researcher and was ultimately granted.

Dictionary Tweet Categorization

After collection, Tweets were categorized into nine dictionary topics consisting of around 80 defining terms each (see Appendix C for full dictionary term-definition pairings). This method of categorization is known as the dictionary method and has been used by numerous recent studies tracking trends in political discussion on Twitter (Ausubel 2019; Scott 2020). My feminine categories included women's rights, familycare, education, and healthcare, and my masculine categories included military, economics, foreign affairs, and policing. I also tracked discussions of COVID-19 using unique terms, separate from those related to healthcare. COVID-19 was not counted towards either feminine or masculine topic frequencies but was counted on its own for the simple purpose of providing perspective on my line graphs of tweet frequency over time.

Regression Introduction

Following categorization, tweets were then analyzed via ordinary least squares (OLS) regression.

The detailed equations for my regressions are included below. Each regression provides a comparison of bivariate to multivariate results, and each regression at least uses control variables

for candidate party and incumbency. Each regression also uses robust standard errors, to correct for potential heteroskedasticity, or violations of the homogeneity assumption, in my data.

b. Research Questions, Hypotheses, and Regression Equations

Question 1

Do female candidates discuss feminine topics more often than male candidates, and do male candidates discuss masculine topics more often than female candidates? After consideration of relevant literature, I expect these propositions to be true. In answering this question, the independent variable to be examined will be candidate gender. The dependent variable will be the frequency at which the candidate discussed different gendered topics on Twitter in the year leading up the to 2018 election. The control variables to be used in this question are candidate party and incumbency, as each are expected to have a distinct effect on discussions of gendered topics. Relevant hypotheses and the generalized regression equation for all regressions measuring the percentage of candidate discussions that relate to gendered topics (regressions 2018 1, 2, 1a-d, and 2a-d) are included below.

 $H0_1$: Women and men are equally likely to discuss feminine and masculine topics.

H1: Women discuss feminine topics more often than men and men discuss masculine topics more often than women.

$$TopicPercent = \alpha + \beta_1 Male + \beta_2 Republican + \beta_3 Incumbent$$

Question 2

Do female candidates receive higher engagement on feminine posts and do male candidates receive higher engagement on masculine posts? Based on the relevant literature, I expect these propositions to be true. The independent variable to be examined in answering this question will be candidate gender. The dependent variable will be a score of candidate engagement, whose calculations are shown in the equation below.

 $Average \ Engagement_{topic \ A} = \frac{average \ \# \ of \ engagements \ on \ tweets \ in \ topic \ A}{average \ \# \ of \ engagements \ on \ all \ tweets}$

In this calculation, engagement refers to the total number of positive engagements a candidate received on Twitter, or a sum of the candidate's "favorites" and "retweets." By this calculation, an engagement score greater than 1.0 will indicate above average engagement on the given topic, and an engagement score between 0 and 1.0 will indicate below average engagement on the given topic. The control variables to be used in this question are candidate party and incumbency, as each are expected to have a distinct effect on discussions of gendered topic engagement. Hypotheses for this section and corresponding regression equations relating to candidate engagement (regressions 2018 3, 4, 3a-d, and 4a-d) are included below.

*H0*₂: Women and men receive equal engagement scores for feminine posts and masculine posts. *H2*: Women receive greater engagement scores than men on feminine posts, and men receive greater engagement scores than women on masculine posts.

 $PercentAverageEngagement = \alpha + \beta_1 Male + \beta_2 Republican + \beta_3 Incumbent$

Question 3

Do differences in political context— namely, the COVID-19 pandemic and the 2020 Black Lives Matter protests— affect the relationship between gender or party and frequency of gendered topic discussions? Based on the literature outlined above, I predict that these crises will affect this relationship in terms of both party and gender, with party affected more than gender. The independent variable to be examined here will be candidate gender. The dependent variables will be two binary variables of a given tweet's placement on the time map of the year. These variables will be "Post-Pandemic" and "Post-BLM." If a tweet was posted at any point after the declaration that COVID-19 was approaching pandemic status by the Center for Disease Control on February 25, 2020, then it will be given a Post-Pandemic value of 1, or True. Similarly, if a tweet was posted at any point after the killing of George Floyd on May 25, 2020, then it will be given a Post-BLM

value of 1, or True. Otherwise, the given tweet will be assigned a Post-Pandemic or Post-BLM value of 0, or False. Relevant hypotheses for this section and corresponding regression equations relating to changes in political context (regressions 2020 1, 2, 1a-d, and 2a-d) are included below.

H0₃: Neither the COVID-19 pandemic nor the BLM protests of 2020 affected the relationship between candidate party or gender and gendered topic discussion frequency.
H3: Either the COVID-19 pandemic or the BLM protests of 2020 affected the relationship between party or gender and gendered topic discussion frequency.

```
TopicPercent
= \alpha + \beta_1 Male + \beta_2 Republican + \beta_3 Incumbent + \beta_4 PostPandemic
+ \beta_5 PostBLM + \beta_6 (Male * PostPandemic) + \beta_7 (Male * PostBLM)
+ \beta_8 (Republican * PostPandemic) + \beta_9 (Republican * PostBLM)
```

c. Dataset Significance

The Growing Importance of Twitter in American Elections

Twitter has played and increasingly large roll in politics in recent years. 98% of House members posted on Twitter in 2020, and current members of Congress also tweeted over 500 thousand times in 2020, more than either legislative body posted on any social media platform. For every bill enacted in 2020, congress people collectively posted 17,912 times. This is compared to only 60 and 11,016 posts on Facebook for these same events, respectively ("Congress on Social..." 2020). Non-incumbent candidates have also been shown to post even more than incumbents in past studies of the 2018 midterms (Ausubel 2019). Thus, Twitter plays a large part in both the legislative and campaigning processes.

Twitter data is not only relevant, it is accessible. Twitter grants access to tweet text and engagement data with few limitations to any researcher who is approved for a Twitter developer account. To be approved, one must simply describe their research project. In addition to being widely available, tweets are by their very nature an excellent source for candidate rhetorical examination, because they are textual (as opposed to verbal or visual), making them easy to

analyze in an automated fashion. Furthermore, tweets must be under 240 characters, where other sources such as speeches can be wordy and impromptu. This means that Twitter is a good place to examine deliberate candidate rhetorical strategy, because the nature of the platform encourages condensed, precise rhetorical choices.

The Significance of House Campaigns

Campaign for the United States House of Representatives are uniquely useful for studies examining campaign rhetoric for several reasons. House elections are prestigious enough to draw the media attention that often exacerbates gendered stereotyping, but not so prestigious or expensive as to deter minority candidates from running to the same extent that elections for Senator, President, or Governor can. This means that House elections can uniquely display trends in gendered rhetoric across a relatively diverse array of candidates.

In terms of the House's benefits for this study specifically, Twitter's immense presence in politics in recent years has been spearheaded by U.S. House members. The House has a comparable percentage of Twitter users as the Senate but many more members, making for a larger body of tweets to choose from. The Representative with the highest number of tweets in the House had over 7,000, compared to the same in the Senate with only around 5,000 tweets. The relatively high Twitter presence in the House is also true for the 10th most active House member, who had over 3,000 tweets compared to the same in the Senate with only around 2,000 tweets. Thus, House Representatives appear to be generally more active on Twitter than Senators, making House data potentially more illustrative of candidate strategy than Senate data ("Congress on Social..." 2020).

The Significance of 2018 and 2020

This study examines two elections, the 2018 midterms and the 2020 presidential election. Twitter data from the 2018 election offers a baseline through which to answer the research questions one

and two. This year was extremely recent, meaning that it will provide the most updated illustration of national trends. This also means that 2018 candidates had heightened Twitter activity, as Twitter activity for candidates has been steadily increasing over time, especially as a result of the Trump presidency and Twitter presence.

Data from the 2020 presidential election is useful for these same reasons and more. In addition to being recent, the 2020 election was conducted largely online because of COVID-19. This, among other reasons, means that 2020 saw the largest increase in candidate online presence in history. The COVID-19 pandemic, paired with the Black Lives Matter protests of 2020, further allow for the examination of hypothesis three on the effects of both feminine-centric (COVID-19) and masculine-centric (BLM) political contexts on the relationship between candidate party or gender on gendered discussions on Twitter.

IV. FINDINGS & ANALYSIS

a. 2018 Findings

Descriptive Statistics

	Total	Nen	Monen	Republic	ans R. Men	R. Word	Penner?	D. Men	D. Worten
# Candidates	2100	1588	460	926	789	116	<u>1174</u>	799	344
# Candidates on Twitter	1272	932	330	533	454	74	<u>739</u>	478	256
# Candidates Active on Twitter	682	542	140	321	289	32	<u>361</u>	253	108
# Total Tweets	135143	102169	32974	53459	45953	7506	<u>81684</u>	56216	25468
# Tweets per Active Candidate	198.2	188.5	235.5	166.5	159.0	234.6	226.3	222.2	235.8
Min Avg. Post Engagements	0.0	0.0	0.6	0.0	0.0	1.8	0.0	0.0	0.6
Mean Avg. Post Engagements	145.0	134.7	183.8	24.2	24.7	20.0	<u>255.6</u>	265.4	233.5
Median Avg. Post Engagements	11.2	10.2	20.1	8.0	8.0	8.1	<u>16.0</u>	14.1	23.2
Max Avg. Post Engagements	41284.5	41284.5	18755.6	787.5	787.5	133.8	41284.5	41284.5	18755.6
StDev. Avg. Post Engagements	1857.9	1910.4	1642.6	70.5	73.7	29.8	2566.1	2818.8	1872.1
Skew of Avg. Post Engagements	19.4	20.7	11.3	7.4	7.2	2.6	14.0	14.0	9.9

Table 1: 2018 Descriptive Statistics

Before beginning the analysis of 2018, it is important to understand the data on which my regressions were conducted. My 2018 regressions examined 135,143 Tweets across 682 majorparty candidates.

Women and Democrats tweeted more than the average candidate in 2018, and Democratic women and Democrats in general received a higher median average engagement on their tweets than the typical candidate. These trends are likely a reflection of Twitter, as the platform tends to have younger, more liberal users than platforms like Facebook. The strong Twitter presence of liberals and women could also be correlated to the context of the MeToo movement and feminist backlash to the misogyny of the Trump presidency.

Men accounted for around 76% of all candidates and 80% of all House candidates who were active on Twitter in the 2018 election. While they received lower median average engagement than women, they received higher mean average engagement across parties and were also responsible

for producing the maximum average engagement in both parties. Men further received a wider range of average post engagements than women, as indicated by the unusually high skew of their average post engagements. Ultimately, these trends illustrate that female candidates in 2018 were less numerous and more homogenous than male candidates were.

Trends in Gendered Topic Discussion

This section will seek to answer hypothesis one (H1) by first exploring whether female candidates discuss feminine topics more than male candidates and second exploring whether male candidates discuss masculine topics more than female candidates. This hypothesis will be examined with gender, party, and incumbency in mind.

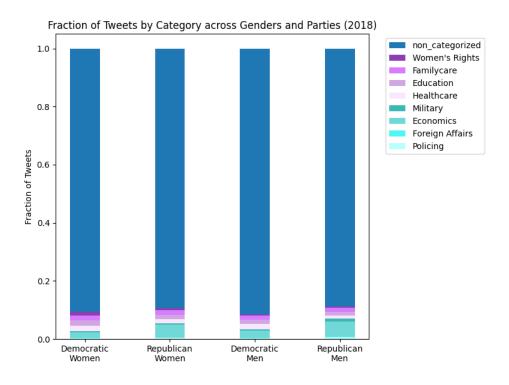
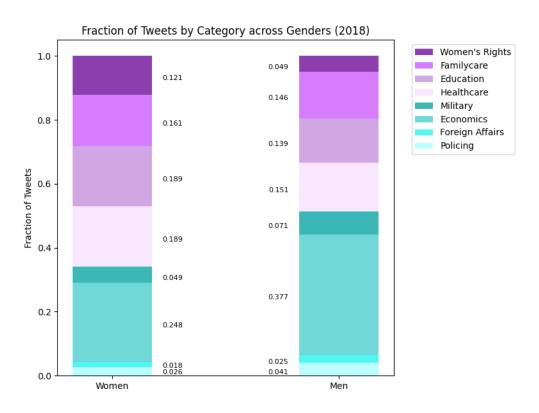


Figure 1: Fraction of Tweets... across Genders and Parties (2018)

We can see in the table above that candidates do not spend many of their tweets discussing gendered topics as they are measured here. The 2018 dataset contained only around 10% categorized tweets, with this percentage relatively consistent across all candidate types. This may

suggest that House candidates post more about non-substantive topics than substantive ones, where "substantive" refers to any policy issue (including the categories discussed here) and "non-substantive" refers to topics such as event announcements, direct interactions with other candidates, or other non-policy related topics.



Figure~2: Fraction~of~Tweets...~across~Genders~(2018)

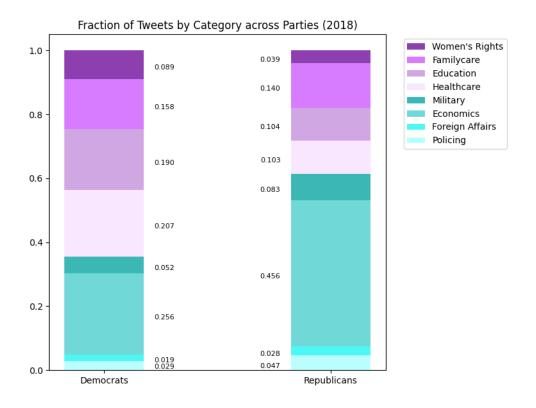


Figure 3: Fraction of Tweets... across Parties (2018)

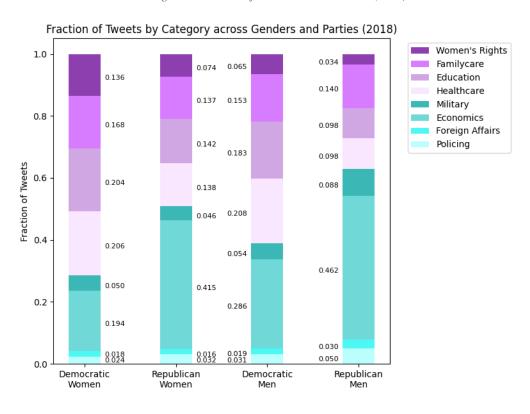


Figure 4: Fraction of Tweets... across Genders and Parties (2018)

The findings of this section are approximated in the bar plots above, which display the fraction of tweets categorized into each gendered topic over total categorized tweets. These plots suggest that, among categorized tweets, women are more likely to discuss feminine topics and men are more likely to discuss masculine topics. Furthermore, Democrats appear more likely to discuss feminine topics and Republicans appear more likely to discuss masculine topics. These plots also make apparent the low number of policing and foreign affairs related tweets and the prominence of economics tweets among masculine tweets across all candidate types in 2018. These plots also suggests that feminine tweets are more common than masculine tweets across most candidate types.

2018 OLS Regression 1 ______ Percent of Tweets Discussing Feminine Topics _____ Bivariate 6.412*** 6.682*** Constant (0.305)(0.324)-1.519*** -1.053** Male (0.370)(0.413)-1.605*** Republican (0.371)Incumbent 0.350 (0.335)_____ ______ *p<0.1; **p<0.05; ***p<0.01 Note:

Table 2: 2018 OLS Regression 1

In the above multivariate ordinary least squares (OLS) regression with control variables for candidate party and incumbency and robust standard errors, I show that Democratic women's average percent of tweets discussing feminine topics fell at roughly 6.7% in 2018, while Democratic men's average percent of tweets discussing feminine topics was around 5.7%.

Republican women's average percent of feminine tweets was approximately 5%, and Republican men's was approximately 4%. Each of these values was statistically significant, with p<0.05. Thus, it seems that a candidate's gender has a significant effect on their discussion of feminine topics. The effect of gender appears to be slightly less than, but ultimately statistically comparable to, the effect of party. Incumbency does not appear to play a role in determining a candidate's preference for feminine topic discussion.

In a series of follow-up regressions on the discussion of each individual feminine topic (see Appendix D1), I found that these differences in feminine topic discussion are largely attributable to changes in discussion of women's rights across genders and parties, as well as changes in discussions of both education and healthcare across parties. Each regression examined here had the same controls, robust standard errors, and at least p<0.05 for all results discussed. Democratic women discussed women's rights in approximately 1.4% of tweets, compared to Democratic men with who discussed women's rights in 0.6% of their tweets. Republican women discussed women's rights in 1.2% of tweets, compared to Republican men with women's rights in only 0.4% of tweets. Thus, it appears that gender has roughly four times the impact of party on a candidate's rate of discussion of women's rights on Twitter. Party played the only significant role in a candidate's discussion of education, with Republicans discussion the topic an average of roughly 36% less than Democrats. Party played a similar solitary role in determining a candidate's discussion of healthcare on Twitter, with Republicans discussing the topic around 46% less than Democrats. There were no significant differences in discussion of familycare across genders or parties, and candidate incumbency did not significantly affect discussions of any feminine topic category.

2018 OLS Regression 2

	Bivariate	Multivariate
Constant	3.288***	2.222***
	(0.236)	(0.250)
Male	2.506***	1.359***
	(0.345)	(0.318)
Republican		3.428***
		(0.403)
Incumbent		0.914**
		(0.404)
======================================	NV-61 CA1	======================================

Table 3: 2018 OLS Regression 2

Controlling for candidate party and incumbency and with robust standard errors to correct for potential heteroscedasticity, the multivariate OLS regression shown above shows that female Democratic challengers discussed masculine topics in approximately 2.2% of tweets in 2018. Democratic men saw an increase in this rate, discussing masculine topics in around 3.6% of tweets. Republican women's rate of masculine tweets fell at around 5.7%, and Republican men's rate of the same fell at around 7%. Incumbents also saw a significant increase in masculine discussion, with incumbency adding roughly 0.9 points to the average percent of masculine topics discussed by any given candidate group. Each of these values was statistically significant, with p < 0.05. Thus, it seems that a candidate's gender has a significant effect on their discussion of masculine topics, with men discussing masculine topics more than women. The effect of gender appears to be less than that of party.

Based on a second series of subsequent regressions examining individual masculine topics (see Appendix D2), I believe that differences in masculine topic discussions are due largely to changes in discussion of the economy across parties and genders. Changes in discussion of the military across parties appear to have shaped broader masculine topic preferences as well. Male and female Democrats alike discussed the military in approximately 0.4% of tweets, while male and female Republicans discussed the same in 1.1% of tweets. Female Democratic challengers discussed the economy in 1.5% of tweets, but the change in candidate label to male, Republican, or incumbent would increase that by 72%, 156.3%, or 69%, respectively. Thus, Republican male incumbents discussed the economy in 5.8% of tweets on average, the highest out of any group for any other gendered category. Foreign affairs tweets accounted for so little of the dialogue in House races in 2018 that the regressions on foreign affairs data produce unrealistic results. Thus, it cannot be concluded that foreign affairs discussions played a significant role in changing the preferences for masculine topic discussion across candidate groups. Policing discussion percentage showed no changes across any dependent or control variables.

These findings support hypothesis one (H1) that female candidates discuss feminine topics on Twitter more frequently than male candidates do and male candidates discuss masculine topics on Twitter more frequently than female candidates do. It seems that trends in feminine tweets are strongly related to female candidates' disproportionate discussion of women's rights, with all other feminine categories showing either a trend over party alone or no trend over either party or gender. Republican candidates overall seem roughly as avoidant of feminine topics as male candidates are. The connection between men and masculine tweets appears largely attributable to male candidates' strong preference for discussing the economy. Candidates from the Republican Party appear strongly tied to masculine rhetoric, much more so than male candidates are.

Trends in Engagement with Gendered Tweets

In this section, I will explore hypothesis two (H2), whether men and women receive different levels of positive engagement on Twitter for discussing masculine or feminine topics. As with the section prior, this section will control for gender, party, and incumbency.

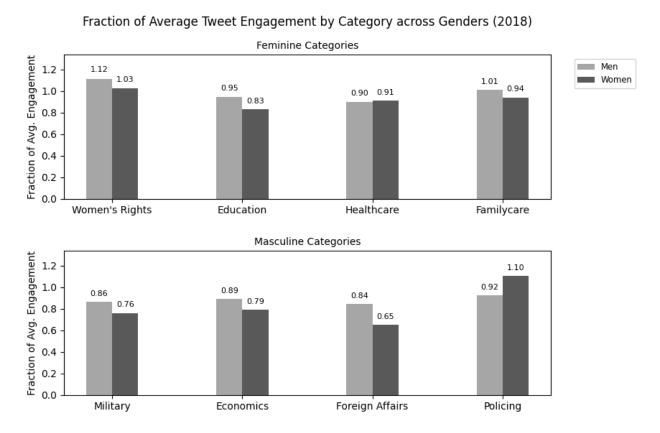


Figure 5: ... Engagement... across Genders (2018)

Fraction of Average Tweet Engagement by Category across Parties (2018)

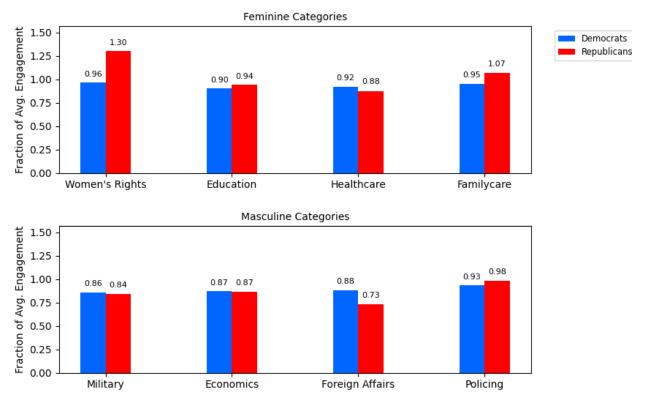


Figure 6: ... Engagement... across Parties (2018)

Fraction of Average Tweet Engagement by Category across Genders and Parties (2018)

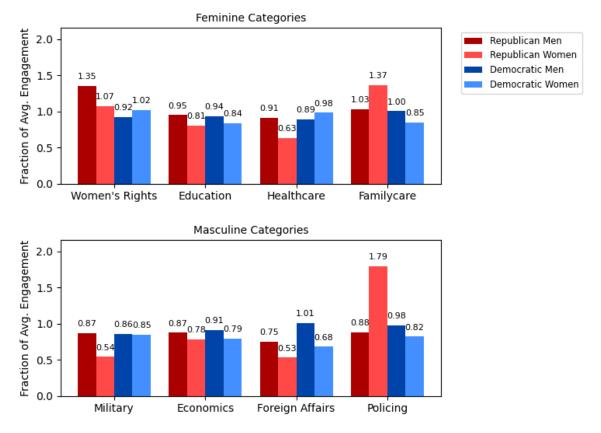


Figure 7: ... Engagement... across Genders and Parties (2018)

The bar plots above display preliminary trends in the level of positive engagement (how many favorites and retweets) different types of candidates received on different types of posts. Here, level of engagement is measured as a fraction of the average engagement the candidate received on all their tweets, categorized or uncategorized. Thus, a bar height over 1.0 implies that the given type of candidate received above average positive engagement on the given type of gendered post.

The preliminary trends displayed here do not appear to be in line with the hypothesis that women receive greater engagement on feminine posts and men receive greater engagement on masculine posts. Rather, it appears that women receive lower than their own average engagement on all gendered posts except for those on policing and women's rights. It also appears that women

receive lower fractions of average engagement than men on all categorized tweets apart from healthcare and policing.

The final plot above displays several unexpected trends in engagement, the most notable of which is the influence of outlier posts—posts with uncharacteristically high engagement—on the fraction of average engagement for Republican women, especially with regard to policing and familycare. The effect of outliers on the trends displayed here may be especially strong for Republican women, as they are the least active on Twitter of any candidate group. This means that, without tests for statistical significance such as those to come, even a single candidate or a single post with above average engagement could skew the results.

Considering these plots alone, it appears unlikely that engagement with gendered tweets varies in any expected way across candidate types. Hypothesis two (H2), that women receive higher engagement on feminine posts and men receive higher engagement on masculine posts, seems unlikely, although further statistical is needed. Such an analysis is included below.

2018 OLS Regression 3

	% Engagement for	[^] Feminine Tweets
	Bivariate	Multivariate
Constant	88.139***	90.438***
	(4.662)	(5.420)
Male	10.395	11.197*
	(6.568)	(6.195)
Republican		-0.580
		(7.874)
Incumbent		-7.212
		(7.365)
Note:	*p<0.1; **	*p<0.05; ***p<0.01

Table 4: 2018 OLS Regression 3

In the OLS regression above, with the same controls as regressions prior, we see that female candidates receive about 90% of their average engagement across all tweets when they tweet about feminine topics. Men appear to receive about 11.2 percentage points higher engagement than women, although this trend is not statistically significant at p < 0.5, and the standard error of 6.2 percentage points makes its significance even more marginal.

While there are no significant trends in engagement across candidate types for discussion of feminine topics overall, detailed statistical examination of individual feminine topics reveals several trends (see Appendix D3). Women overall receive 82.5% of normal engagement on women's rights tweets, and men receive only 51.7% of their average engagement for the same. Republican's also receive around 18 percentage points lower average engagement on education tweets compared to Democrats, who receive around 78.4% of their average engagement on education tweets. It also appears that incumbents receive approximately 18 percentage points

lower engagement for healthcare tweets, whereas non-incumbents receive 79.5% of their typical engagement for healthcare tweets.

2018 OLS Regression 4

	% Engagement for	Masculine Tweets
	Bivariate	Multivariate
 Constant	89.211***	94.295***
	(13.273)	(12.565)
Male	-3.123	-3.072
	(13.702)	(16.007)
Republican		6.608
		(11.297)
Incumbent		-22.084***
		(7.061)
=======		
======= Note:		**p<0.05; ***p<0.0

Table 5: 2018 OLS Regression 4

In 2018 OLS Regression 4, above, we see that non-incumbent candidates receive about 94.3% of their typical engagement on tweets discussing masculine topics. This appears to be slightly higher engagement than candidates received on feminine topics. Considering the standard error of 12.7 percentage points, however, this is not a significant increase. It appears that incumbents receive 22 percentage points less engagement than non-incumbents, but no other trends are apparent across candidate types.

Examination of individual masculine topics through OLS regression reveals differences in engagement between candidate types within the same gendered topic category, as well as differences across categories for the average candidate (Appendix D4). All non-incumbent candidates received 72.7% of their average engagement on tweets discussing economics,

compared to incumbent candidates who received around 57.8% of average engagement on economics tweets. Tweets discussing policing saw a similar drop in percentage of average engagement for incumbents, with non-incumbent candidates receiving around 41.5% average engagement compared to incumbents with around 25% average engagement on policing tweets. All candidates, with no statistically significant changes across candidate types, received about 32.8% of their typical engagement on tweets discussing the military and about 17.8% of their typical engagement on tweets discussing foreign affairs.

These findings do not support hypothesis two (H2), that female candidates receive higher positive engagement on feminine tweets and male candidates receive higher engagement on masculine tweets. Ultimately, it appears that candidates receive lower engagement on tweets that discuss feminine or masculine topics than they do on uncategorized tweets, as tweets in every gendered topic category received below average engagement across all candidate types. This may reflect the nature of House campaigns, in that perhaps voters positively engage more often on posts about non-substantive issues. Perhaps more reasonably, this could be reflection of Twitter as a platform, in that perhaps Twitter users are more likely to interact with a post about an event or a new endorsement than they are to interact with a post about a policy issue.

b. 2020 Findings

Descriptive Statistics

	Tatal	Nen	Women	Republic	R. Men	R. Warn	Defination	D. Men	D. Women
# Candidates	1906	1371	535	989	781	208	917	590	327
# Candidates on Twitter	1694	1186	508	<u>854</u>	661	193	840	525	315
# Candidates Active on Twitter	1410	991	419	703	555	148	<u>707</u>	436	271
Total Tweets	563466	377198	186268	222316	173353	48963	341150	203845	137305
# Tweets per Active Candidate	399.6	380.6	444.6	316.2	312.3	330.8	<u>482.5</u>	467.5	506.7
Min Avg. Post Engagements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Mean Avg. Post Engagements	269.3	291.9	217.4	191.1	228.4	52.9	344.1	370.4	303.1
Median Avg. Post Engagements	22.8	20.0	30.4	17.9	20.4	14.3	27.6	20.0	40.0
Max Avg. Post Engagements	41295.2	41295.2	20621.9	26017.3	26017.3	2063.2	41295.2	41295.2	20621.9
StDev. Avg. Post Engagements	1946.6	2155.2	1349.7	1253.0	1406.5	182.1	2429.0	2815.5	1652.7
Skew of Avg. Post Engagements	15.6	15.2	11.8	<u>15.3</u>	13.7	9.9	13.6	13.1	9.6

Table 6: 2020 Descriptive Statistics

It is important for 2020, as it was for 2018, to understand the general layout of the data to be examined in the regressions to come. My 2020 regressions examined 563,466 tweets across 1410 major-party candidates. Each of these measurements is around two times the equivalent measurement from 2018, even though there were around 200 fewer candidates running in 2020. This change is likely due to several factors. For one, the 2020 presidential election was perhaps the most polarizing election in American history. Donald Trump's candidacy and presidency likely encouraged political discourse on Twitter, as his 2020 presidential campaign and Administration utilized Twitter more extensively than any other in American history. Additionally, 2020 was the first year of the COVID-19 pandemic, which may have caused more politicians and political activists to move their discussions online. The killing of George Floyd also likely caused an increase in Twitter activity from previous years among candidates and activists..

In 2020, as in 2018, women and Democrats tweeted more than the average candidate.

Democratic women and Democrats in general continued to receive higher than average median

average engagement on their tweets. The repetition of these trends in 2020 suggests that they are more a reflection of Twitter as the platform than a reflection of political context.

Men accounted for around 72% of all candidates and 70% of all House candidates who were active on Twitter in the 2020 election. This amounts to a weakening of their majority from 2018. Men continued to receive lower than the typical median average engagement than women in 2020, but they were again responsible for producing the maximum average engagement across parties. Men received a wider range of average post engagements than women, as indicated by the unusually high skew of their average post engagements. Ultimately, these trends illustrate that female candidates in 2020 were less numerous and more homogenous in their social media patterns than male candidates.

Trends in Gendered Topic Discussions over Time

This section will test the validity of hypothesis three (H3), that political context alters the correlations between trends discussion of gendered rhetoric and candidate gender or party.

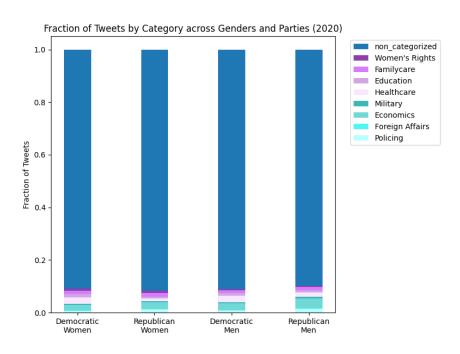


Figure 8: Fraction of Tweets... across Genders and Parties (2020)

As is shown in the chart above, categorized tweets in 2020 amounted to roughly 10% of tweets across all types of candidates. My analysis of the fact mirrors that described in my 2018 analysis. Additionally, there appears to be a slight decrease in percent of discussions of the economy from 2018.

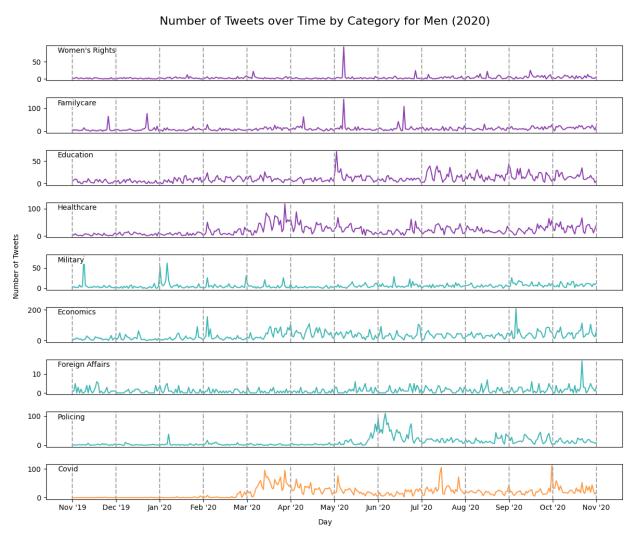


Figure 9: Number of Tweets over Time by Category for Men (2020)

Number of Tweets over Time by Category for Women (2020)

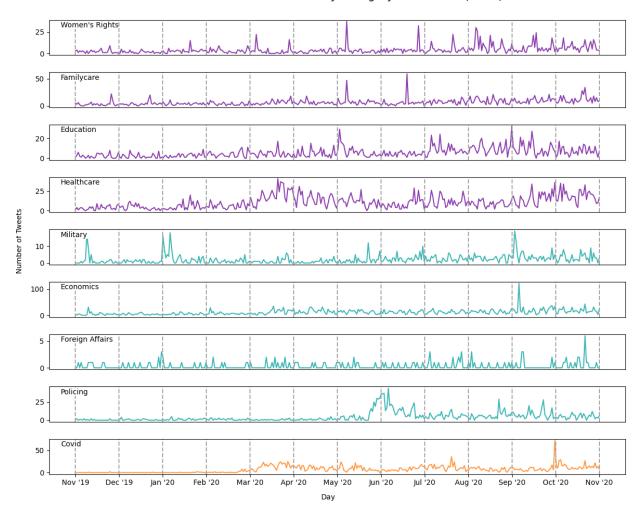


Figure 10: Number of Tweets over Time by Category for Women (2020)⁴

The line graphs above display preliminary trends in discussions of gendered topics over time for men and women. In addition to reflecting many of the overall trends in gendered rhetoric that seen in the 2018 data, these graphs show interesting trends in the effect of political context on gendered discussions. The declaration of COVID-19 as approaching pandemic status by the CDC on February 25 increased candidate discussion of healthcare across all candidate types. The killing of

⁴ Please note the changes in y-axis across topics for Figure 10.

George Floyd on May 25 appears to have done the same for policing. Further statistical examination, as is included below, is necessary to test whether trends in gendered rhetoric across candidate gender and party persist in the presence of differently gendered crises.

	Percent of Tweets Disc	ussing Feminine Topic
	Bivariate	Multivariate
Constant	5.713*** (0.141)	6.994*** (0.425)
Male	-0.769*** (0.185)	-1.031** (0.451)
Republican		-2.199*** (0.411)
Incumbent		0.717*** (0.180)
Post-Pandemic		0.194 (0.488)
Post-BLM		-2.459*** (0.306)
Male:Post-Pandemic		0.765 (0.549)
Male:Post-BLM		-0.171 (0.404)
Republican:Post-Pandemi	С	0.163 (0.522)
Republican:Post-BLM		1.058** (0.431)

Table 7: 2020 OLS Regression 1

The first OLS Regression for 2020 displays the impact of gender, party, incumbency, and post-time (in relation to the onset of the COVID-19 pandemic and the killing of George Floyd) on candidate discussions of feminine topics. Most importantly, this regression uses interaction variables to measure the impact of the time a tweet was posted in relation to the COVID-19

pandemic and the Black Lives Matter movement⁵ on the relationship between gender or party and discussion of feminine topics.

Based on this regression, we can see that the average pre-pandemic, non-incumbent, female Democratic candidate discussed feminine topics in roughly 7% of their tweets. If the candidate differed from this norm by gender alone, they discussed feminine topics in 1 percentage point fewer tweets. If the candidate differed by party alone, they discussed feminine topics in 2.2 percentage points fewer tweets. These trends seem to continue the patterns expressed by the 2018 data, that men and Republicans discuss feminine topics less often than women or Democrats. If the candidate was an incumbent in 2020, they discussed feminine topics in 0.72 percentage points more tweets than non-incumbents across genders and parties. This trend is a small but significant contrast to 2018, when incumbency had no effect on feminine topic discussion. This regression also shows that there was a 2.5 percentage point drop in percent of tweets discussing feminine topics following the start of the BLM movement for all types of candidates. Finally, and most importantly for our discussion of hypothesis three (H3), this regression displays that Republicans saw a 1.058 percentage point smaller decrease in discussion of feminine topics following BLM than Democrats did.

An examination of similar regressions for each of the four feminine topics (see Appendix D2) reveals several trends in candidate discussion of feminine topics across candidate types and over time. Men were 0.870 percentage points less likely than women (1.56%) to discuss women's rights, and discussions of women's rights dropped by 0.77 points following the onset of the pandemic.

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⁵ Recall that the "start" of the coronavirus pandemic for the purposes of this study was February 25, the day that the Center for Disease Control announced that coronavirus was approaching pandemic status. The "start" of the Black Lives Matter movement for the purposes of this study was May 25, the day that George Floyd was killed.

The familycare regression further reveals that incumbents were 0.26 points less likely than non-incumbents (1.57%) to discuss familycare in 2020, and that discussions of familycare dropped by 0.57 points following the start of the BLM movement. Regressing on education reveals that Republicans were 0.63 points less likely to discuss education compared to Democrats (1.26%). Incumbents were 0.23 points more likely to do the same. Republicans also saw a 0.430-point reduction in the negative effect of the BLM movement on their discussions of education, meaning that they continued to discuss education in spite Democrats' shift away from the topic following BLM. Finally, a regression of healthcare tweets reveals that Republicans saw a 1.73-point decrease in their discussion of healthcare compared to Democrats (2.61%). Incumbents saw an increase in this average percentage of tweets, however, by 0.7 points. Following the BLM movement, all candidates saw a decrease in discussion of healthcare tweets by 1.65 percentage points.

Viewed together, these regressions reveal that the BLM movement weakened the correlation between party and discussions of feminine topics, especially on the topic of education. Following the BLM movement, Republicans' aversion to feminine topics and Democrats' commitment to feminine topics both weakened. Thus, it appears that hypothesis 3 (H3), that differences in political context affect the relationship between party or gender and gendered topic discussion, is supported when considering the effects of party (but not gender) on frequency of feminine topics discussions.

2020 OLS Regression 2

	Percent of Tweets Disc	ussing Masculine Topics
	Bivariate	Multivariate
 Constant	4.061*** (0.146)	2.712*** (0.342)
Male	1.628*** (0.209)	1.671*** (0.509)
Republican	0.00100.000.000.000	2.620*** (0.562)
Incumbent		0.677*** (0.225)
Post-Pandemic		0.458 (0.414)
Post-BLM		0.198 (0.338)
Male:Post-Pandemic		-1.024 (0.642)
Male:Post-BLM		0.198 (0.494)
Republican:Post-Pander	nic	-0.203 (0.692)
Republican:Post-BLM		-0.513 (0.523)
 Note:		0.1; **p<0.05; ***p<0.0

Table 8: 2020 OLS Regression 2

The second OLS Regression for 2020 displays the impact of gender, party, incumbency, and post-time in relation to pertinent crises on candidate discussions of masculine topics. As with the regression on feminine topics, this regression uses interaction variables to measure the impact of the political context in which a tweet was posted on the relationship between gender or party and discussion of masculine topics.

This regression displays several significant trends, although none of them relate to political context. Female Democratic challengers discussed masculine topics in 2.7% of their tweets. Men saw a 1.7-point increase in this percent, Republicans a 2.6-point increase, and incumbents a 0.7-

point increase. These trends mirror those of 2018, where Republicans saw the greatest increase in masculine topic discussions, followed then by men, and lastly by incumbents.

Examination of regressions on each masculine topic (see Appendix D2) once more resulted in several notable trends, including trends over time and trends in the interaction of time and party. Men were 0.37 points and Republicans 0.35 points more likely than Democratic women (0.82%) to discuss the military. Furthermore, discussions of the military dropped by 0.55 points following the pandemic and increased by 0.34 points following the onset of the BLM movement. Men, Republicans, and incumbents were also 1.1, 1.7, and 1.1 points more likely than the average female Democratic challenger (1.53%) to discuss the economy. Discussions of the economy increased by 0.94 points post-pandemic and decreased by 1.1 points post-BLM, and Republicans saw a notable but statistically insignificant (p < 0.1) increase in their tendency to discuss the economy compared to Democrats following the onset of the BLM movement. Foreign affairs discussions amounted to less than .07% of tweets for women, and around 0.15% of tweets for men. Lastly, Republicans saw a 0.532 increase in percentage of policing tweets and incumbents saw a 0.23-point decrease in percentage of politicing tweets compared to Democratic challengers at just 0.3% of tweets relating to policing. There was a 1-point increase in percentage of tweets relating to policing across all candidates following the BLM movement. Republicans also saw a 0.3-point decrease in policing discussions following the onset of the pandemic, compared to Democrats who saw a 0.03point increase. Republicans also saw a statistically uncertain (p<0.1) but notable increase in their increase in policing discussion following the BLM movement compared to Democrats.

While these regressions show that neither the pandemic nor the BLM movement altered trends in candidate discussion of masculine topics writ large, the policing regression seems to reveal that Republicans saw a slight yet significant weakening of their commitment to policing discussions

following the pandemic, where Democrats saw a slight increase in such. Thus, it appears that hypothesis 3 (H3), that differences in political context affect the relationship between party or gender and gendered topic discussion, is supported when considering the effects of political party, but no gender, on the masculine topic of policing.

c. Discussion of Findings

Hypothesis 1 Analysis

My first hypothesis (H1), that female candidates discuss feminine topics on Twitter more frequently than male candidates do and that male candidates discuss masculine topics on Twitter more frequently than female candidates do, is supported by my findings from both 2018 and 2020. In both 2018 and 2020, women were significantly more likely to discuss feminine topics than men. In both 2018 and 2020, I found that these differences were most significant in the feminine category of women's rights. Across both years, I found that the effect of party on discussion of feminine topics was more severe than the effect of gender, but the effect of gender on was nonetheless significant.

In both 2018 and 2020, I found that men were more likely than women to discuss masculine topics. In both years, it appears that this trend was mediated mainly by men's commitment to discussions of the economy. Party was a higher mediating factor than gender in 2018, but in 2020 party had less of an impact on discussion of masculine topics than gender did. Across both years, incumbents discussed masculine topics more than non-incumbents, with a lower effect than party or gender across both years.

The general commitment to feminine topics from women supports the idea that women meet gendered expectations of their competency on feminine issues in their House campaigns. The stronger Democratic commitment to feminine topic discussion suggests that past research explaining the femininity of the Democratic party is not without merit and suggests that candidate rhetoric varies less across gender than it does across political party. Furthermore, the tendency of men, Republicans, and incumbents to discuss masculine topics suggests that men also adhere to gendered expectations of their topic competencies on the campaign trail. The further association of the Republican party and incumbents to discussions of masculine topics suggests that associations of the GOP and politics in general with masculinity are not unfounded. Overall, candidates' limited discussions of either feminine or masculine topics suggests that gendered topic discussions may be less important in 2018 and 2020 than they seem to have been in previous elections.

Hypothesis 2 Analysis

My second hypothesis, that that women receive higher engagement on feminine posts and men receive higher engagement on masculine posts, is not supported by my findings. My 2018 regressions displayed that there were no trends in engagement across gender for either feminine or masculine topics. Several trends emerged in engagement, but these were not predicted by existing literature on gendered rhetoric. As a result of my rejection of hypothesis two (H2), I am unable to conclude that women prefer to discuss feminine topics and men prefer to discuss masculine topics as a result of pressure from voters to adhere to gender stereotypes. While this rejection of H2 using Twitter data does not necessarily rebut the idea that gender stereotypes exist and impact women on the campaign trail, it certainly leaves open the possibility that candidates discuss gender-congruent topics as a result of their own preferences.

Interestingly, categorized tweets across all categories received lower than average engagement for all candidate types. This suggests that Twitter users may interact more with non-issue related tweets than they do with substantive, or issue-related tweets. Based on my understanding of campaign Twitter accounts, these non-substantive tweets may discuss several topics, such as political event planning, political endorsements, name-calling interactions with other candidates, and holiday greetings, among other topics.

Hypothesis 3 Analysis

My third hypothesis, that differences in political context affect the relationship between party or gender and gendered topic discussion, is supported by my findings with regard to party, but not gender. I find that the effects of candidate party on discussions of feminine tweets was altered following the Black Likes Matter protests, especially with regard to discussions of education. Republicans saw a lesser decrease in discussions of education than Democrats did following the killing of George Floyd.

I also find that, while the differences in political context do not affect the relationship between party or gender and discussion of masculine topics in general, these changes in context did affect the relationship between party and policing discussions. The correlation between Republicanism and discussion of policing weakened in the months following the onset of the coronavirus pandemic. There were also statistically insignificant (p<0.1) but nonetheless notable trends towards Republicans embracing discussions of policing and the economy following the 2020 BLM protests.

Ultimately, it seems that the effect of political context was inconsequential for the relationship between gender and gendered topic discussion. Thus, it seems that gender norms are a more consistent force in mediating gendered topic discussions over time than political party norms. This conclusion is consistent with previous research suggesting that commonly understood ideals of femininity and masculinity remain consistent over generations in the United States, whereas party

politics can be adjusted relatively quickly as the result of new party leadership or other changes in political context.

Methodological Strengths and Weaknesses

The strengths of this study include its novelty, as well as the large and comprehensive nature of its dataset. This study is among the very first handful of studies to analyze Twitter data from the 2018 midterms, and likely the first to do so through the lens of gendered rhetoric. This study is also among the first to analyze Twitter data from the 2020 election, and almost certainly the first to do so with special regard to the effects of COVID-19 and BLM on changes in gendered campaign rhetoric. The novelty of this study means that it can provide both new findings and new methodology for future researchers to build from. The size and span of the dataset of tweets collected for this study is a further strength. The dataset gathered for this study includes nearly 750,000 tweets over two elections, making it larger than others covering the same period. Moreover, this data is comprehensive, in that it considers every non-deleted tweet from every Twitter account for every House candidate for either election.

The methodology used here has its pitfalls, however. Firstly, this study is unable to examine race or ethnicity. Despite my efforts and the efforts of specialists in data collection from Penn Libraries, I could not find a resource to reliably determine candidate race for all House candidates. The data available online to track candidates' race or ethnicity on a large scale existed for certain races but not others, and data often relied on voter observations, not candidate self-identification. Relying on this data to determine candidate race would not have adhered to my standard of using only self-identified demographic data to describe candidates. I anticipate that race plays a role in mediating gendered topic discussions, but race could not be included in this study. Secondly, this study was not able to examine the sexuality or nuanced gender identity of candidates. As with race,

limited data is available online which tracks candidates' self-identified sexuality on a large scale. This study also extrapolates gender-identity from candidates' self-identified pronouns, which may be unreliable. Even the two candidates who used they/them pronouns in their Ballotpedia bios has to be excluded from this study, as it would not have been statistically sound to extrapolate on such a complex community based on the patterns of two individuals. Thirdly, the use of House races may have caused an underestimation of the effects of gender stereotyping, as House candidates receive limited amounts of the media attention that facilitates the devaluation of stereotypically feminine traits and topic competencies at higher levels of office. Fourthly, the use of Twitter within specific time boundaries has its drawbacks. Any tweets candidates posted before one year prior to Election Day were cut off from my dataset for simplicity's sake. Some candidates also lacked Twitter accounts and were therefore excluded. Some candidates likely preferred another platform such as Facebook or tailored their rhetoric to match the assumed demographics of whichever platform they are using. While the use of Twitter presented many benefits for my research, any of these conditions related to the use of Twitter could have skewed my results. Finally, the use of search terms to identify topics may have caused an insignificant number of erroneous tweets to be categorized, despite the numerous mechanisms used to prevent such from occurring.

Areas for Further Research

My rejection of hypothesis two (H2) means that I am unable to conclude whether women prefer to discuss feminine topics because of pressure from voters or as a result of their own preference. Further research is needed to suggest whether candidates make rhetorical decisions because of societal pressure of because of the inherent tendencies and competencies of men and women.

Furthermore, candidates' limited discussions of either feminine or masculine topics calls into question the significance of gendered political discussion on candidate success. Further research

is needed to determine to whether and to what extent these discussions predict candidate electoral success.

Finally, I would suggest that the trends examined in this study be examined using data from other social media sites, such as Facebook, Instagram, campaign websites, or other emerging platforms. While social media data has the unique ability to quantitatively track how voters react to candidate rhetoric, various social media platforms must be explored if the trends examined here are to be fully understood across a comprehensive candidate and voter population.

V. CONCLUSION

In this paper, I have argued that gender stereotypes pose a unique challenge to female candidates in American elections. I have further argued that women might best address the challenges posed to them by highlighting their femininity on the campaign trail, even across parties and political contexts. I explored the merits of this assertion using a novel dataset of 698,609 tweets posted across 2,092 major-party House congressional campaigns in the years prior to the 2018 and 2020 elections. Using this data, I found that a candidate's gender correlates with the gendered topics they discuss on Twitter, a candidate's gender does not correlate with the engagement they receive on tweets discussing gendered topics, and the COVID-19 pandemic and the Black Lives Matter movement of 2020 changed the relationship between candidate party (but not candidate gender) and gendered topic discussion on Twitter in 2020.

Ultimately, discussions of gendered topics as they are categorized here amounted to only a small fraction of total tweets posted in 2018 or 2020. While differences in discussion frequencies across categories are statistically significant, I cannot conclude that they are a determining factor in women's electoral success. The possibility remains, however, that women's tendency to discuss feminine topics on the campaign trail is a reflection of their unwillingness to run without motivation from a feminine issue (Lawless and Fox 2004). While I was able to conclude that men and women discuss masculine and feminine topics more frequently, respectively, my findings do not support that these differences in discussion are a result of voter pressures. Indeed, trends in voter engagement with gendered posts on Twitter do not follow any trends predictd by the information in my literature review. With regards to discussions of gendered topics over time, it appears that trends in gendered topic discussions across genders are more resilient than trends across political parties when subjected to changes in political context.

If women are to be represented equally in American government and society, researchers must address the causes for their aversion to candidacy. Eventually, women must be allowed to express their full personalities and values, without worrying about the perceptions of others based on gender stereotypes. Until Americans can begin to see women for the unique individuals they are, however, female candidates can use the information presented in this work to aid their navigation of the gendered expectations that might affect their candidacies. Hopefully, by using the tools set out by this and other works in campaign strategy, women can work towards the very equality in government and society that might diminish the effects of gender stereotypes on their candidacies and their lives.

VI. APPENDICES

A1. Examples of Gendered Character Traits

Feminine Character Traits

Warmth, gentility, care, sensitivity, emotionality, talkativeness, caution, passivity

Masculine Character Traits

Assertiveness, coarseness, toughness, aggressiveness, intellect, agency, rationality, confidence

A2. Examples of Gendered Topic Competencies

Feminine Topic Competencies

Women's rights, education, healthcare, family care, environment, social welfare

Masculine Topic Competencies

Military, policing, economics, infrastructure, foreign policy

B1. GitHub Link

https://github.com/estalick/twitter-campaign-rhetoric-analysis

This link will connect readers to every piece of code used in this project. Further details are provided in the project's README.md, which can be found at the link provided above.

C1. Feminine Topic Dictionaries (First 25 Terms)

Women's Rights

gender parity, sex workers, empowering women, prochoice, sex, reproductive freedom, sex discrimination, pro choice, patriarchy, misogyny, female, birth control, gender stereotypes, women, contraceptive, equal rights amendment, transgender, gender equality, trans, woc, sexual assault, suffragette, family leave, wage gap, maternity leave, ...

Familycare

kids, parents, parenting, nephew, relatives, household, nanny, mothers, spouse, babysitter, daycare, grandma, home, stepfather, familycare, daughters, eldercare, grandpa, foster, cooking, cook, pet, chores, clothes, wife, ...

Education

bachelors degree, schooling, tutor, kindergarteners, schools, student, academic, teacher, school buses, study, bussing, exams, exam, homeschooler, diploma, teachers, advanced placement, professor, highschoolers, highschool, math, students, university, professors, transfer student, ...

Healthcare

healthcare, health insurance, public health, medical, medicine, addiction, opioids, cancer screening, health services, mammograms, mental health, medicare, medicareforall, medical, preexisting conditions, preexisting conditions, pharmaceutical, pharma, big pharma, opioid, medicaid, health care, aca, obamacare, ...

C2. Masculine Topic Dictionaries (First 25 Terms)

Military

aircraft, airforce, armed conflict, armed occupation, arms sales, army, battle of, battlefield, bomb, bomber, bombing, cadet, cadets, coast gaurd, commander, corporal, covert operation, detonate, drone strike, drone strikes, endless war, enlistment, grenade, guerrilla, gunner...

Economics

consumer goods, capital, jobs, imf, distribution, economics, tariffs, private sector, import, gdp, loans, bailout, firms, gig economy, stocks, private firms, firm, inflation, labor, private contractor, bail out, economic growth, laissezfaire, prices, free market, ...

Foreign Affairs

international treaty, paris climate, foreign nationals, international trade, tariffs, international relations, foreign intelligence, geneva convention, refugee, countries, new start, protectionist, protectionism, nato, nationalist, paris agreement, foreign adversaries, paris accords, foreign ally, foreign allies, passport, international alliance, global policy, entente, un, ...

Policing

unmarked police, police radio, say their names, abolish police, baton, patrols, all lives, patrols, stop and frisk, arrest, saytheirnames, prison, black bodies, policestation, warrant, jail, search seizure, officer, excessive force, acab, warrantless, night stick, body camera, officers, pd, ...

C3. Experimental Topic Dictionaries (First 25 Terms)

COVID

2018 OLS Regression 1a

covid, corona, coronavirus, pandemic, epidemic, mask, antimasker, antimaskers, ppe, shadow pandemic, virus, vaccine, herd immunity, operation warp speed, doses, pfizer, antibodies, operationwarpspeed, social distance, social distancing, socialdistancing, moderna, phase, clinical trials, clinical trial, ...

2018 OLS Regression 1b

D1. 2018 OLS Regressions

Feminine Topic OLS Regressions (Regressions 2018.1a-d)

	Percent of Tweets Di	scussing Women's Right	:s F	Percent of Tweets [Discussing Familycare
	Bivariate	Multivariate		Bivariate	Multivariate
Constant	1.348***	1.372***	Constant	1.716***	1.621***
	(0.142)	(0.135)		(0.141)	(0.161)
Male	-0.868***	-0.812***	Male	-0.094	-0.151
	(0.149)	(0.155)		(0.190)	(0.238)
Republican	L.	-0.205**	Republican		0.116
		(0.101)			(0.231)
Incumbent		0.080	Incumbent		0.230
		(0.098)			(0.193)
=======			.== =======		
			.== ========		
2018 OLS F	Regression 1c		2018 OLS Regr	ession 1d	
		Discussing Education			======================================
	Bivariate	Multivariate		Bivariate	Multivariate
Constant	1.833***	1.952***	Constant	1.515***	1.737***
	(0.228)	(0.229)		(0.127)	(0.148)
Male	-0.374	-0.168	Male	-0.183	0.078
	(0.265)	(0.293)		(0.164)	(0.190)
Republicar	า	-0.709***	Republican		-0.807***
The state of the s		(0.243)	erroren • om er om e		(0.180)
Incumbent		0.157	Incumbent		-0.116
		(0 220)			
		(0.229)			(0.162)
		(0.229)		============	

Masculine Topic OLS Regressions (Regressions 2018.2a-d)

2018 OLS R	egression 2	2a				2010	ULS	Regression	11 2	D
========	========			=====	=======					
	Percent of	f Tweets	Discussing	the	Military			Percent	of	Ţ

	Percent of Tweets Di	scussing the Military	P	ercent of Tweets Di	iscussing the Economy
	Bivariate	Multivariate		Bivariate	Multivariate
Constant	0.535***	0.382***	Constant	2.303***	1.470***
	(0.094)	(0.103)		(0.191)	(0.218)
Male	0.281**	0.065	Male	1.859***	1.054***
	(0.117)	(0.109)		(0.298)	(0.284)
Republican		0.708***	Republican		2.297***
		(0.116)			(0.372)
Incumbent		-0.040	Incumbent		1.015***
		(0.121)			(0.368)

*p<0.1; **p<0.05; ***p<0.01 *p<0.1; **p<0.05; ***p<0.01 Note: Note:

2018 OLS Regression 2c

2018 OLS Regression 2d

	Percent of Tweets Di	scussing Foreign Affairs	9	Percent of Tweets I	Discussing Policing
	Bivariate	Multivariate	.=	Bivariate	Multivariate
Constant	0.165***	0.159***	Constant	0.285***	0.211***
	(0.029)	(0.034)		(0.052)	(0.060)
Male	0.167***	0.098*	Male	0.200**	0.143
	(0.062)	(0.053)		(0.080)	(0.090)
Republican		0.278***	Republican	l ·	0.144
3.00.		(0.089)			(0.110)
Incumbent		-0.198**	Incumbent		0.137
		(0.081)			(0.117)
=======			:= (=======		
======= Note:	*p	======================================	= ======= 1 Note:	*p<0.1;	**p<0.05; ***p<0.03

Feminine Tweet Engagement OLS Regressions (Regressions 2018.3a-d)

		Vomen's Rights Tweet	:s	% Engagament for	Familycare Tweets
	Bivariate	Multivariate		Bivariate	Multivariate
Constant	80.449***	82.488***	Constant	68.272***	70.831***
	(9.157)	(10.587)		(6.007)	(7.063)
Male	-32.001***	-30.796***	Male	1.705	3.694
	(12.168)	(10.591)		(8.839)	(9.598)
Republican		-2.373	Republican		-4.990
		(13.162)			(11.173)
Incumbent		-5.048	Incumbent		-4.748
		(13.166)			(9.691)
Note:	ρ.υ	l; **p<0.05; ***p<0.	OI Noce.	рсө.1,	p<0.05;p<0.0
2018 OLS Re	gression 3c ====================================	Education Tweets	2018 OLS Regi	ression 3d ======== Engagament for	Healthcare Tweets
2018 OLS Re	gression 3c ====================================	Education Tweets	2018 OLS Regi	ression 3d Engagament for Bivariate	Healthcare Tweets
2018 OLS Re	gression 3c ====================================	Education Tweets	2018 OLS Regi	ression 3d Engagament for Bivariate	Healthcare Tweets Multivariate
2018 OLS Re	gression 3c ====================================	Education Tweets Multivariate	2018 OLS Regi	ression 3d Engagament for Bivariate	Healthcare Tweets
2018 OLS Re	gression 3c ===================================	Education Tweets Multivariate 78.403***	2018 OLS Regi	ression 3d Engagament for Bivariate 70.814***	Healthcare Tweets Multivariate 79.468***
2018 OLS Re ======= Constant	gression 3c ====================================	Education Tweets Multivariate 78.403*** (7.520)	2018 OLS Regi	ression 3d Engagament for Bivariate 70.814*** (11.643)	Healthcare Tweets Multivariate 79.468*** (11.247)
2018 OLS Re	gression 3c ===================================	Education Tweets Multivariate 78.403*** (7.520) -11.230	2018 OLS Regressions & Constant	ression 3d Engagament for Bivariate 70.814*** (11.643)	Multivariate 79.468*** (11.247)
2018 OLS Re	gression 3c ===================================	Education Tweets Multivariate 78.403*** (7.520) -11.230 (8.288)	2018 OLS Regi	ression 3d Engagament for Bivariate 70.814*** (11.643)	Multivariate 79.468*** (11.247) -4.035 (14.200)
2018 OLS Re	gression 3c ===================================	Education Tweets Multivariate 78.403*** (7.520) -11.230 (8.288) -18.048***	2018 OLS Regressions & Constant	ression 3d Engagament for Bivariate 70.814*** (11.643)	Multivariate 79.468*** (11.247) -4.035 (14.200) -14.276
2018 OLS Re ======= Constant	gression 3c ===================================	Teducation Tweets Multivariate 78.403*** (7.520) -11.230 (8.288) -18.048*** (6.723)	2018 OLS Regueres	ression 3d Engagament for Bivariate 70.814*** (11.643)	Multivariate 79.468*** (11.247) -4.035 (14.200) -14.276 (11.401)
2018 OLS Re ======= Constant Male Republican	gression 3c ====================================	Teducation Tweets Multivariate 78.403*** (7.520) -11.230 (8.288) -18.048*** (6.723) 4.817	2018 OLS Regularies % Constant Male Republican Incumbent	ression 3d Engagament for Bivariate 70.814*** (11.643) -10.146 (12.727)	Multivariate 79.468*** (11.247) -4.035 (14.200) -14.276 (11.401) -18.107** (8.786)

Masculine Tweet Engagement OLS Regressions (Regressions 2018.4a-d)

2018 OLS Regression 4a			2018 OLS Regression 4b				
. ======		Military Tweets			r Economics Tweets		
		Multivariate		Bivariate			
Constant	32.961*** (5.685)	32.846*** (6.515)	Constant		72.713*** (6.001)		
Male	13.774** (6.818)	11.973* (6.899)	Male	5.580 (6.870)	8.030 (7.261)		
Republica	n	7.434 (6.504)	Republicar	1	-3.437 (6.817)		
Incumbent		-5.475 (6.670)	Incumbent		-14.910** (6.323)		
=======			=======				
Note:		p<0.05; ***p<0.01			**p<0.05; ***p<0.01		
	Regression 4c			LS Regression 4d			
========	% Engagament for	Foreign Affairs Twee	ets		for Policing Tweets		
		Multivariate		Bivariate	Multivariate		
Constant	18.138*** (5.117)	17.754*** (5.978)	Consta	nt 38.488*** (12.775)			
Male	3.618 (6.877)	3.467 (8.276)	Male	-1.205 (13.741)	-2.136 (16.233)		
Republicar	1	0.129 (7.936)	Republ	ican	7.928 (12.155)		
Incumbent		1.202 (7.312)	Incumb	ent	-16.509** (8.263)		

D2. 2020 OLS Regressions

2020 OLS Regression 1a

Male:Post-Pandemic

Republican:Post-Pandemic

Republican:Post-BLM

Male:Post-BLM

Feminine Topic OLS Regressions (Regressions 2020.1a-d)

	Percent of Tweets Dis	cussing Women's Rights		Percent of Tweets D	iscussing Familycare
	Bivariate	Multivariate	-0	Bivariate	Multivariate
Constant	0.943*** (0.064)	1.557*** (0.223)	Constant	1.498*** (0.068)	1.572*** (0.185)
Male	-0.552*** (0.069)	-0.870*** (0.252)	Male	-0.031 (0.110)	-0.095 (0.226)
Republican		-0.245 (0.192)	Republican		0.401* (0.237)
Incumbent		0.004 (0.050)	Incumbent		-0.265** (0.118)
Post-Pandemic		-0.770*** (0.235)	Post-Pandemic		0.226 (0.245)
Post-BLM		0.051 (0.099)	Post-BLM		-0.566*** (0.190)

0.473* (0.267)

-0.032 (0.109)

0.182 (0.204)

-0.089 (0.087) 2020 OLS Regression 1b

Male:Post-Pandemic

Republican:Post-Pandemic

Republican:Post-BLM

Male:Post-BLM

Note: *p<0.1; **p<0.05; ***p<0.01 Note: *p<0.1; **p<0.05; ***p<0.01

2020 OLS Regression 1c			2020 OLS Regression 1		
	Percent of Tweets Discussing Education			Percent of Tweets I	Discussing Healthcare
	Bivariate	Multivariate		Bivariate	Multivariate
Constant	1.080*** (0.052)	1.259*** (0.161)	Constant	2.192*** (0.101)	2.606*** (0.356)
Male	0.056 (0.069)	0.323 (0.198)	Male	-0.242** (0.120)	-0.388 (0.308)
Republican		-0.627*** (0.201)	Republican		-1.727*** (0.228)
Incumbent		0.278*** (0.075)	Incumbent		0.700*** (0.105)
Post-Pandemic		0.033 (0.184)	Post-Pandemic		0.705* (0.388)
Post-BLM		-0.293** (0.118)	Post-BLM		-1.652*** (0.193)
Male:Post-Pandemic		-0.148 (0.238)	Male:Post-Pandemic		0.510 (0.368)
Male:Post-BLM		-0.217 (0.162)	Male:Post-BLM		-0.162 (0.244)
Republican:Post-Pandemic		-0.014 (0.247)	Republican:Post-Pande	emic	0.425 (0.299)
Republican:Post-BLM		0.430** (0.168)	Republican:Post-BLM		0.410* (0.245)
Note:	*p<0.1	; **p<0.05; ***p<0.01	Note:	*p<0.1	L; **p<0.05; ***p<0.01

-0.070 (0.298)

0.240 (0.259)

-0.431 (0.310)

0.307 (0.300)

Masculine Topic OLS Regressions (Regressions 2020.2a-d)

2020 OLS Regression 2a 2020 OLS Regression 2b

	Percent of Tweets Discussing the Military			Percent of Tweets Discussing the Econom	
	Bivariate	Multivariate		Bivariate	Multivariate
Constant	0.587*** (0.059)	0.816*** (0.148)	Constant	2.549*** (0.110)	1.532*** (0.294)
Male	0.286*** (0.085)	0.371** (0.177)	Male	1.148*** (0.169)	1.065** (0.455)
Republican		0.346** (0.175)	Republican		1.720*** (0.514)
Incumbent		-0.156* (0.087)	Incumbent		1.101*** (0.195)
Post-Pandemic		-0.546*** (0.156)	Post-Pandemic		0.936** (0.365)
Post-BLM		0.356** (0.142)	Post-BLM		-1.119*** (0.264)
Male:Post-Pandemic		-0.237 (0.195)	Male:Post-Pandemic		-0.644 (0.584)
Male:Post-BLM		0.145 (0.185)	Male:Post-BLM		-0.024 (0.405)
Republican:Post-Pandemic		-0.122 (0.194)	Republican:Post-Pandemi	ic	0.241 (0.645)
Republican:Post-BLM		-0.088 (0.202)	Republican:Post-BLM		-0.767* (0.447)
 Note:	*p<0.	1; **p<0.05; ***p<0.01	Note:	×n√0 1	; **p<0.05; ***p<0.0

2020 OLS Regression 2c

2020 OLS Regression 2d

Percent of Tweets Discussing Foreign Affairs

Percent of Tweets Discussing Policin

	Percent of Tweets Discussing Foreign Affairs			Percent of Tweets Discussing Policing	
	Bivariate	Multivariate		Bivariate	Multivariate
Constant	0.109*** (0.025)	0.067* (0.035)	Constant	0.815*** (0.075)	0.297*** (0.084)
Male	0.043 (0.033)	0.093** (0.039)	Male	0.151* (0.087)	0.142 (0.122)
Republican		0.021 (0.037)	Republican		0.532*** (0.123)
Incumbent		-0.041 (0.028)	Incumbent		-0.228*** (0.065)
Post-Pandemic		0.038 (0.053)	Post-Pandemic		0.030 (0.102)
Post-BLM		0.026 (0.064)	Post-BLM		0.934*** (0.147)
Male:Post-Pandemic		-0.061 (0.076)	Male:Post-Pandemic		-0.082 (0.139)
Male:Post-BLM		-0.009 (0.084)	Male:Post-BLM		0.086 (0.204)
Republican:Post-Pandemic		0.011 (0.077)	Republican:Post-Pandemi	С	-0.333** (0.140)
Republican:Post-BLM		0.016 (0.088)	Republican:Post-BLM		0.326* (0.181)
note:	*p	<0.1; **p<0.05; ***p<0.0	= ====================================	*p<0.1;	**p<0.05; ***p<0.01

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