Politicians of a Feather, Tweet Together

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Abstract

David Mayhew brilliantly sets the stage in 1974 when he argued that candidates are seekers of re-election (Mayhew, 1974). Based on this premise, one would expect potential candidates to utilize every effort possible to help realize this goal, including incorporating new technology into their campaigns. This paper analyzes Twitter usage among candidates running for office within the U.S. Congress, prior to the 2010 elections to determine whether traditional forms of campaigning have been replaced or supplemented with social media, specifically Twitter. Data was gathered on 884 candidates who ran for election during 2010 to determine relationships between total number of Congressional Tweets and incumbency, years in office, political experience, expenditures, candidate's party, chamber of congress, candidate's sex, and candidate's age. Through a linear regression analysis, the candidate's sex uniquely displayed high correlations with the number of Congressional Tweets. Additionally, the regression analysis displayed correlations among incumbency, expenditures, Congressional Chamber, and party identification. This data is most easily explained through a political economy approach to transaction costs and campaigning.

Introduction

As technology continues to evolve, conventional campaigning is becoming a thing of the past. Wasted, inefficient efforts and money that could be more efficiently utilized to strategically help achieve election and/ or re-election. According to Mayhew, candidates are primarily concerned with seeking re-election (1974). With the invention of social networking sites, communications spread like uncontrollable wildfire. Without an on/ off

switch, one is unable to control the flow of information, which could have potentially

devastating effects. Twitter is relatively new, making its debut in 2006. It enables followers

to send 140 character limit bursts of information to whomever, whenever. The quickness

and speed allows for instant communication around the world from any computer or

mobile device. Twitter enables candidates to reach a surplus of new potential voters with

little to no costs. In line with Mayhew (1974), candidates should therefore engage and use

Twitter to their benefit, possibly increasing potential votes to massive numbers. This study

seeks to explore the factors that influence a politician's decision to Tweet. By looking at

candidate's campaign strategies, researchers will be able to determine if Tweeting enables

candidates to reach out to a larger audience and collect additional votes.

The Digital Divide

As increases in technology advance, Internet usage has steadily improved. The

1990s marked a dramatic growth with electronic discussion and in November of 1999,

President Bill Clinton became the first president to go online and answer e-mail queries

from citizens (Davis, 2005). Ten years later President Obama embraced the Internet's wide

and expanding reach, encouraging citizens to Tweet their political thoughts and opinions.

What began as a media outlet that was skewed from the general public because it

represented mostly young, well educated, and affluent (Gainous and Wagner, 2007; Davis,

2005), has since expanded at exponential rates. According to Gulati and Williams,

education, income, ethnicity, age and urbanization are all potential influences on a

candidate's Internet use (2010). Approximately one in three young voters under the age of

thirty-six rely on the Internet as their main source of political information (Panagopoulos, 2009).

However, other researchers have also found the Internet guilty of exacerbating the pattern of unequal participation based on income (Mossberger and Stansbury, 2003). This further encourages the digital divide between the haves and the have-nots. Ironically, because findings on race and ethnicity have been mixed, education has become the most important factor in the digital democratic divide (Mossberger and Stansbury, 2003). Through the obvious correlation of education and income, the Internet encourages the digital divide shifting the focus from outreaching to potential voters to reinforcing participation. Furthermore, even though the Internet alters the resources necessary for political activity, the individuals who are participating online are similar to those participating offline (Best, 2005). This sequence further encourages an ever-evolving circle where Internet participation is reinforcing rather than supplementing. Therefore, the Internet is not capturing new, potential voters, but instead encouraging and supporting the beliefs already in place.

<u>Progression in Social Media</u>

The expansion of the Interest into politics brought forth visions of direct democracy surrounded with citizen involvement. Voters would be able to communicate directly with Representatives and relay any possible concerns or criticisms. Moreover, Representatives would feel a since of accountability and responsibility. However, according to Davis, the outcome has encouraged the reinforcement of opinions rather than the exchange of views, because political group discussions tend to be dominated by certain ideological views (2005).

During the 2000 campaigns, candidates embraced chat rooms and town hall style formats, encouraging and fostering electronic discussion (Davis, 2005). Candidates were not only able to maintain direct and continued control over the questions asked, they were able to monitor and manipulate messages similar to the exclusively candidate controlled messages found in television ads and websites (Bimber and Davis, 2003). With the expansion of social networking sites, this is no longer the case. Social networking sites have presented the candidates with unprecedented opportunities, allowing blogs to take over the traditional role of political parties (Panagopoulos, 2009). Furthermore, candidates are no longer able to control the flow of information. Bode, et. al., examined candidates for the 2010 Senate to understand how the use of Twitter within campaigns relates to traditional campaign tactics (2011). The authors found that because traditional media outlets require candidates to surrender control over content and disposition of messages, Twitter enables and allows candidates to circumvent this control (Bode, et. al., 2011). This creates a new personalization of politics by utilizing Twitter as a candidate centered medium that is unconstrained by party control. Internet users in general are able to post blogs, websites, and Tweets about or referencing anyone they choose, including potential candidates. Additionally, as these sites become more mainstream and conventional, they are gaining appeal across generations, which will help to lessen the age gap that was once dominant.

Bimber and Davis found that Internet users are not attempting to bypass traditional media (2003). Rather than using the Internet to displace information, people are supplementing their current positions with information gathering (Bimber and Davis, 2003). Therefore, the people who are already interested in politics are supplementing the

information they already currently have, displaying that the Internet is not attracting new uninterested voters into making a conscious choice. Moreover, Hill and Hughes also believe that the Internet reinforces beliefs that are already developed rather than fundamentally changing people and their attitudes (1998). The Internet is reinforcing the already present political attachments, providing additional data and information for voters who are seeking to bolster their vote choices (Bimber and Davis, 2003). Again, the Internet is enabling voters to find out additional information, not transform them.

On the other hand, the Internet does provide the opportunity to reach potential voters that are not interested in politics through mass communications. This can translate into intensity either for or against a candidate (Panagopoulos, 2009). Intensity for or against a candidate does not necessarily translate into votes. The circle of reinforcing beliefs could excel and stimulate potential participation, but it is just as likely to quell participation in response to negative information. In the end, the biggest problem involves reaching potential voters who have not already developed a strong ideological position who are using the Internet to reinforce their beliefs because the research indicates that these voters are not the average Internet users.

Influences on Internet Usage

According to Fenno, members of Congress have three goals: achieving re-election, achieving power in Congress, and creating good public policy (2003). Fiorina explains how members of Congress are rational maximizers who are seeking re-election and will choose efficient strategies in order to achieve their goals (1977). These theories shift the focus of campaigning onto voter approval. By employing multiple strategies, targeted at specific groups, member of Congress have the ability to use precise campaigning techniques in their

home style that are individually tailored. Through the presentation of self, allocation of resources, and explanation of Washington activities, home style skills are able to ensure re-election victory for potential candidates (Fenno, 2003).

If a candidate is following Mayhew and Fenno's theory of seeking and achieving re-election, the Internet could be beneficial if used strategically. Kenny and McBurnett analyzed contested congressional district races in 1984 and found that incumbents who reached a large percentage of the electorate are difficult to beat (1997). However, the authors also found that challengers are able to achieve a greater direct effect from contact in general because they are less well known (Kenny and McBurnett, 1997). Although their research focused on the use of television to enhance the effects of spending, a modern twist on their research would expect Twitter usage to aide in the effects of campaign contact. Incumbents should embrace new technology and use Twitter to reach a greater percentage of the electorate, while challengers should also embrace Twitter in order to gain additional contact and become better known. For example, Puopolo found that when analyzing the 2000 Senate race, challengers used the web as an additional tool to maximize their chances of being elected (2001). Because the actual cost of Twitter is low, every candidate, incumbent or challenger, has an equal opportunity of utilizing it as a campaign tool.

Furthermore, beyond the digital divide, candidates utilize constituency composition when deciding whether to implement the Internet into campaign techniques. Herrnson, Stokes-Brown, and Hindman found that although candidates with younger and better educated constituents engage in more online campaigning, the strategic and structural circumstances of the race along with the number of years a candidate has spent in electoral politics is also relevant (2007). Therefore, candidates tailor online campaigns to the

characteristics of the constituents. The authors concluded that incumbency, campaign

spending, electoral competiveness, and the number of people who live in a district provide

the best explanations for why candidates invest in online campaigning (Herrnson, Stokes-

Brown, and Hindman, 2007). Moreover, Herrnson, Stokes-Brown, and Hindman also found

that candidates with longer careers in electoral politics were less likely to campaign online

when compared to those with shorter careers (2007). Thus, political experience and

incumbency should affect whether a candidate engages and utilizes online campaigning

options, not accounting for transaction costs.

Wagner and Gainous also found that web presence is a significant predictor of the

total votes obtained in the 2006 Congressional elections, even when controlling for

funding, experience, and incumbency (2009). This demonstrates that candidates are

evolving from simply supplementing traditional media outlets to engaging the Internet as

part of a detailed campaign strategy to win office. Because web presence could be

influencing the amount of total votes obtained, candidates can strategically use the Internet

to bypass the once circular motion of participation and use online campaigning to their

electoral victory benefit. Examining Congressional websites in October and November of

2002, Lipinski and Neddenriep concluded that candidates were using websites to facilitate

the work of journalists, enhancing and expanding traditional media (2004). Specifically

examining campaigning with Twitter, Williams and Gulati found that constituency

attributes also influenced the decision to adopt Twitter as a medium of campaigning

without affecting the impact on Twitter usage (2010). This previous research suggests that

candidates implement the Internet as a campaign tool when it will aide and expand the

current campaign.

Websites/ YouTube

An analysis of Congressional websites during 2006 revealed conflicting impetuses for website usage (Gulati and Williams, 2007). The research found that challengers demonstrated a greater interest in relationship building and connection with the voters (Gulati and Williams, 2007). This competiveness increased the likelihood of using websites for mobilizing supporters, while incumbents and poorly financed candidates tended to opt out of posting on websites (Gulati and Williams, 2007). Moreover, Esterling, Lazer, and Neblo found that shorter tenure contributed to successful innovation of quality websites (2005). Additional research examined Congressional candidates' use of YouTube during 2008 and concluded through a multivariate analysis that better financed candidates and those in competitive elections were more likely to become early adopters of YouTube (Gulati and Williams, 2010). Again, YouTube is not replacing traditional campaign tools, but instead it is effectively augmenting and supplementing communications produced by traditional media outlets. This focuses the thrust of the Internet on involving and connecting with voters as opposed to mobilizing.

Websites and YouTube are similar to Twitter because they are immediate, easy and cost effective. Candidates can engage in these social networking sites irrespective of their campaign-spending budget. Moreover, candidates can also engage their assistants to utilize these social networking sites on their behalf. Due to the exquisite nature of technology, aides and assistants are able to post links, maintain websites, upload videos to YouTube, and send out messages on Twitter as if they themselves were the candidates running for office. This allows the candidate to enjoy the benefits received from technology with little, if any, effort. Finally, the swiftness and speed of the Internet also enables candidates, or their

assistants, to respond to developments instantly, thoroughly keeping the candidates involved in current, up to date discussions if he or she chooses to do so. Therefore, assuming every candidate rationally uses Twitter, the quality and content of Tweets is brought center stage.

Influences on Twitter Usage

Chi and Yang found that Democrats and Republicans benefit from Twitter in different ways (2010). Democrats are mostly seeking transparency where the citizens are receiving the information they want, while Republicans engage through outreach where the government is telling the citizens what they want to hear (Chi and Yang, 2010). According to Chi and Yang, Republicans utilize Twitter through the Internet community to generate public support and coerce ideological rivals to vote in favor of the policies the Representative is sponsoring (2010). On the other hand, transparency is most important to younger politicians who lack experience and are yet to gain the public's trust, therefore resulting in Representatives who adopt Twitter being mostly electorally secure (Chi and Yang, 2010)[1]. Furthermore, Golbeck found that Representatives are using Twitter as a vehicle for self-promotion to disperse information that their offices would normally share to other forms of media (2010). Although Twitter communication can enable direct communication with constituents, Representatives are fostering the illusion that citizens are actually more connected with Representatives. These sounds bites and informational posts are not aimed at improving transparency where the citizens are receiving pertinent information. Instead, Tweets are reinforcing the information that the Representative wants to disperse, which further supplements traditional media campaigning. However, unlike

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[1] This is contrary to other research, See Alder, Gent and Overmeyer, (1998).

historically where the media acted as a gatekeeper, Twitter allows the candidate to control the message. With candidates controlling the message, the war chest of campaign funds becomes even more important.

Moreover, Lassen, Brown, and Riding conclude that candidates are more likely to use Twitter if they are members of the minority party, party leaders urge them too, if they are young, or if they serve in the Senate (2011). Furthermore, the authors found that electoral vulnerability has little or no effect and only age has strong and consistent effect (Lassen, Brown, and Riding, 2011). This result is expected because younger members are more comfortable with new technologies; and, therefore more likely to understand its potential and utilize it as part of a campaign strategy. In line with previous research (Herrnson, Stokes-Brown, and Hindman, 2007), Lassen, Brown, and Riding also found that Senators are more likely to use the Internet when compared to members of the House of Representatives (2011). Because the constituents that make up a Senate district are much larger when compared to House districts, Senate members are forced to rely on innovative techniques to reach voters and garner support for election or re-election.

Williams and Gulati found that party identification, specifically Republicans, and campaign resources lead to extensive Twitter usage, while a Member's age and urban constituency breakdown do not (2010). Although these results differ from Lassen, Brown, and Riding's conclusion that candidates are more likely to utilize Twitter if they are young (2011), they are not surprising given the fact that candidates themselves do not have to engage in Tweeting and can delegate the task to their (potentially younger) assistants. Ironically, even though the vote share that the incumbent receives was not significant, Williams and Gulati did find that members with secure margins of victory tweet more often

(2010), further supporting the theory that candidates are attempting to supplement their current campaign strategies by using Twitter. Glassman, Straus, and Shogun analyzed Twitter usage during August and September 2009 and found that on average the House sent more tweets than the Senate (79% compared to 21%) and House Republicans sent more than House Democrats (55% to 24%) and Senators (12% to 9%) (2009). Juxtaposing the number of Tweets per day, Wednesdays received the most reported Tweets followed by Tuesdays and Thursdays and Mondays and Fridays, with Saturdays and Sundays receiving considerably less numbers of total Tweets (Glassman, Straus, and Shogun, 2009). These results are consistent given that a majority of business takes place during the middle part of the week. Furthermore, the selective use of Twitter during the week implies that candidates are engaging Twitter as a campaign tool, utilizing the quick and ease of relaying messages to keep constituents apprised of the latest developments.

Campaigns as Firms

Although the previous literature has successfully speculated correlations among candidates and Twitter usage, most have failed to examine candidates and Twitter through the guise of political economy. The broad features of transaction costs permit varied transactions to fit within the political economy framework (Williamson, 1979). Treating the campaign as an organization or a firm enables the researcher to examine campaign decisions based upon rational transaction costs, as opposed to subjective qualifications. According to Coase, transaction costs associated with using the market enable the development of organizations (1937). Furthermore, organizations are rational actors that will seek to maximize profits while decreasing expenditures. In order to efficiently run the organization, transaction costs must be taken into account.

The study and application of transaction costs within the campaign setting allows the researcher to explore the campaign as a sustaining organization that is willing to engage in complementarities as supplementing campaign tools, not replacing. Any candidate has the ability to utilize available complementarities, especially when the transaction cost is low to nonexistent. Moreover, campaigns with additional resources are able to engage in complementarities more frequently, or to a greater extent, juxtaposed to their less financed opponents. A hierarchical structure is developed where larger and more financially secure campaigns are able to delegate and employ staffers to engage in the complementarities available. As previous research has demonstrated, the Internet is used to help campaigns supplement their current strategy with complementarities as opposed to replacing traditional campaign methods. Because of this, challengers and incumbents should both be engaging in Tweeting because of the low to nonexistent transactions costs within their campaign.

<u>Hypothesis</u>

Based upon the previous literature, the researcher believes that challengers should be more likely to Tweet than incumbents because challengers should embrace unconventional, new technologies more frequently and with alacrity. Challengers should be more willing to reach out to possible potential voters in any way possible to win the election, including Tweeting. However, because of the low transaction costs associated with Tweeting, incumbents and challengers should both be engaging in this activity. Also, the researcher would expect that the number of years as an incumbent and the amount of political experience would not affect the propensity to Tweet. The researcher hypothesizes that the greater amount of time as an incumbent or time in politics would not lower the

decision to engage in Tweeting because of the low transaction costs. Conforming to Mayhew (1974) and Fenno (2003), candidates seeking re-election would engage in Tweeting irrespective of the amount of time spent in politics or as an incumbent because they would be concerned with transaction costs.

Moreover, the researcher would expect the amount of expenditures spent during the 2010 campaign to also influence the number of Tweets congressional candidates engaged in. The candidate with greater expenditures should Tweet more frequently than candidates with smaller total expenditures because they are fully engaging their campaign efforts and funds. Also, greater expenditures would allow a candidate to hire a specialized staffer who's sole responsibility is to follow and engage in Tweeting. Additionally, in conformance with previous research conducted by Gulati and Williams (2010) and Peterson and Surzhko-Harned (2011), Republicans should be more likely to Tweet than their Democrat counterparts and Senators should be more likely to Tweet that member of the House as evidenced by Lassen, Brown, and Riding, (2010).

Finally, the researcher believes that sex and age should not influence a candidate's propensity to Tweet. Moreover, because the transaction costs are low with Tweeting, it would behoove any candidate, regardless of age or sex to Tweet. Furthermore, the researcher believes that age could affect a candidate's decision to Tweet. Younger politicians who have continuously been exposed to newer technology and social networking media throughout their lives might be more likely to understand and incorporate Twitter into their campaign. Lastly, because Twitter enables other people to engage in Tweeting on behalf of a candidate, age might not play a significant role in the amount of Tweets.

Specifications and Data

In examining the number of Tweets 884 candidates engaged in during the six months prior to the 2010 November election, and reviewing 64,557 Tweets[2], candidates engaged in Tweeting anywhere from zero times to 1,340 times during the six-month period. The dependent variable, total number of Tweets, is coded as the total raw number of Tweets during the analyzed time period. The candidates are categorized by state, chamber ("1" for House of Representatives and "2" for Senate), and district[3]. Additional information concerning the candidate's sex ("0" for Male and "1" for Female) and ethnicity ("0" for Caucasian, "1" for African-American, "2" for Hispanic/ Latino, "3" for Asian-American, "4" for Middle-Eastern, "5" for South/ Central Asian, "6" for Native American, and "7" if the information is not available) is also gathered and coded. Each candidate's age is gathered and coded as the raw number. Information regarding the candidates incumbency status is gathered and coded as "1" for incumbent and "0" for challengers. The data regarding incumbency experience and political experience is coded as a raw number, by the number of years the candidate has been an incumbent in that particular office and the number of years the candidate has spent in Congress, respectively. The total number of expenditures for the winner of 2010 and the loser of 2010 is also recorded and coded as a raw number, in addition to whether the candidate actually won or lost in 2010 ("0" for Lost during 2010 and "1" for Winner of 2010). Moreover, the 2008 winner vote and 2008 loser vote were also recorded and coded as a raw numbers. The total number of candidates was

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[2] The actual data collection of Tweets was conducted by Dr. Kevin Wagner from Florida Atlantic University and Dr. Jason Gainous from the University of Louisville. Their data was supplemented with age and sex information by the researcher.

[3] District is used if they are seeking election in the House of Representatives or else coded "0" for Senate elections.

recorded along with the total vote share received for the 2010 election, both as raw

numbers. Finally, the party identification was coded, "0" for Democrats, "1" for

Republicans, and "2" for Independents[4].

Methodology

       Multiple models are used in order to explore the potential relationship between

candidates and Tweeting. After conducting several linear regression analyses, clear

correlations developed between candidates and the total number of Tweets, similar to

previous analyses.

--------- Insert Table 1 Here ----------- Linear Regression

As displayed by the regressions, incumbency and chamber of congress were both

significant. Moreover, the variables winner expenditures for 2010 and loser expenditures

for 2010 were also significant. Finally, sex of the candidate was also significant, revealing

that women are more likely to Tweet more frequently than men, within the data set. A T-

Test was conducted to verify the correlation between a candidate's sex and number of

Tweets.

--------- Insert Table Here ---------- T-Test

Lastly, bi-variate cross tabulations were also conducted to examine the unequal variances

across the groups. The dependent variable, total congressional Tweets, was recoded into

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[4] There was only one Independent recorded, Charles Crist from Florida

two groups divided by the median. The lower group is coded "0" for 0 through 80, and the

larger group was coded "1" for 81 through 1,340. The independent variables political

experience, expenditures for winner 2010, expenditures for loser 2010, 2008 winner vote,

2008 loser vote, total number of candidates, and age were also recoded into two groups

divided by the median.

--------- Insert Table Here ----------- Coding Scheme

The results of the cross tabs displayed significant results for the same previous variables as

the regressions indicating that the shared variances are attributable to something else.

----------- Insert Table Here --------- Cross Tabs

<u>Analysis</u>

Multiple linear regression analyses were conducted to explore the effects of

potential variables on the total number of Tweets congressional candidates engaged in. The

models, while conforming to previous research, did display unexpected results. According

to the linear regressions, there is a strong negative relationship between incumbency and

the number of Tweets. The less a candidate is an incumbent; the more likely they are to

Tweet. This result is consistent with previous research that predicts that challengers are

more likely to utilize new technology in hopes of winning the election or re-election.

Moreover, the data conforms to Mayhew's theory that candidates are seekers of re-election

(1974). However, because incumbents, when compared to challengers, are not using

Twitter greatly, Mayhew's theory begins to loose ground- although is not altogether

defeated. Ideally, Mayhew's re-election theory would be bolstered if incumbents and

challengers Tweeted at identical amounts, both attempting to gain support to win the

election or re-election. However, incumbents might not utilize Twitter while still engaging

and acquiescing to Mayhew's theory of re-election. If Twitter was not an active part of the

incumbent's campaign strategy before, the candidate might decide not to take any chances

and continue on the same campaign path that allowed him or her to win the election in the

first place. Furthermore, because of low transaction costs, all candidates should

incorporate Twitter into their campaign strategy.

Moreover, the statistical results also displayed a relationship between the Winner

Expenditures 2010 and the number of Tweets. The more money spent on the campaign, the

more likely the candidate was to Tweet. Although one would expect the frugal campaign to

make use of and utilize every potential advertising avenue available, especially if the cost

was low, the significance of the variable indicates that highly funded candidates are using

Twitter because it is low cost. Because the correlation was not present in the data, it is

assumed that the Internet is not the free speaking, open classroom once assumed. Instead,

the Internet is just an additional avenue, besides television ads, where candidates are

getting their already overly publicized message out to voters. The Internet is not being used

to open the door for less funded candidates; but alternatively, is another pawn in a

capitalistic election due to low transaction costs and rational campaign strategies.

Additionally, similar to previous research, the data displayed a relationship between

the Chamber of Congress and the total number of Tweets, indicating that members of the

Senate are more likely to Tweet than fellow members of the House. This result conforms to what others researchers have found and indicates that the Senate is utilizing Twitter as an effective mechanism for reaching out to and informing constituents/ voters. Because the Senate, while pursuing re-election, has a larger constituency base when juxtaposed with the House, it is expected that they would utilize every potential avenue of contact to gain name recognition, especially if it is versatile and free, aka low transaction costs.

Also, because the data did not demonstrate a correlation between age and the total number of Tweets, candidates of all ages are engaging in Tweeting. This further supports that candidates are using Twitter within their campaign strategies because is a cost effective supplement to tradition campaign methods.

Finally, the data revealed a correlation between the sex of the candidate and the total number of Tweets, indicating that women were more likely to Tweet than men. Traditionally, female candidates have fewer resources dedicated to their campaign strategy. One would expect that those with fewer resources would more actively engage the services of free advertising and outreach by Twitter. However, this is in direct conflict with the results from the Winner Expenditures 2010 results above. Furthermore, transaction cost theory would support the result that all candidates should use Twitter because it imposes little cost on the candidate. Additionally, women could have specific targeted constituencies where Twitter is the appropriate medium to reach these voters. In comparison to their male counterparts, women might focus more on reaching younger voters while males do not single out specific individuals, but instead attempt to reach the entire constituency as a whole. Furthermore, women might rely on organizations and connections established prior to entering office. All in all, women and men are both using

Twitter to supplement and complement their current campaign. The fact that women are engaging in Twitter use more frequency than men is an artifact that requires additional exploration.

Discussion and Conclusions

The results obtained from the data were consistent with previous research on Twitter usage among Congressional members. Among Congressional candidates, challengers are more likely to Tweet, Senators are more likely to Tweet, and the more money spent in campaigning increases Tweeting. Interestingly, the research revealed that women are more likely to Tweet than men. These relationships are best explained through a political economy approach examining transaction costs.

Because campaigns are organizations, ran like firms, transaction costs play an intricate role in the development and implementation of campaign fund and spending allocation. The significant variables display correlations between incumbency and expenditures, indicating that all candidates are Tweeting. Since transactions costs are extremely low for Tweeting, candidates are able to implement Twitter into their campaign strategies as a low cost complement to their existing tools. This information suggests that the quality and substance of the Tweets needs to be examined more closely.

Moreover, the results from the data further suggest that in accordance with "the nature of the firm" candidates are utilizing Twitter to supplement their current campaigns. The focus then becomes on the war chest of resources each candidate has at his or her disposal. Additional resources enable a candidate to hire a staffer whose specific job description entails following and responding via Twitter. Juxtaposed to a candidate with less fluid and available resources, who is responsible Tweeting messages individually,

should display different techniques and possibly even different levels of successfulness. Therefore, the hierarchical structure of the campaign becomes an efficient resource and variable affecting content analysis of Tweets.

In conclusion, the expansion of the Internet into social networking sites like Twitter has left many unanswered questions regarding the transformation of the political process. Everyone is waiting to see if Twitter, Facebook, and YouTube will enable, or even encourage, the government to become more accountable because of direct citizen input. The questions remain; will Congress become more personal? Will Congressional approval increase? Furthermore, political economists question whether the apparent influences in Tweeting are simply artifacts.

Beyond the reaches of this paper, it would be interesting to analyze data regarding Congressional approval and trust to determine if Tweeting creates a stronger bond and relationship between the constituency and their elected representative. Additionally, turnout investment should be analyzed, specifically focusing on whether candidates are measuring returns on social networking use. This would enable the researcher to determine if candidates are responding to Tweets from constituents, or simply using Twitter as a push medium. Furthermore, it would also be interesting to examine the nature of Congressional Tweets. Are the candidates simply using Twitter as a campaign tool for election or do the messages continue throughout the term? Are the Tweets personal in nature where the candidate is developing a personal bond with constituents? These questions, along with many more, plague researchers who are attempting to predict and explain the ever-evolving relationship between the voters and Congress.

Appendix

Table - Linear Regression

Model	B	Std. Error	Beta	t	Sig.	
Incumbency	-76.239	14.277	-0.231	-5.34	0.000	***
Winner Expend 2010	1.166E-05	0.000	0.256	5.976	0.000	***
Sex of Candidate	42.826	17.776	0.103	2.409	0.016	**
Age of Candidate	0.002	0.037	0.003	0.058	0.954	

Model	B	Std. Error	Beta	t	Sig.	
Incumbency	-82.487	19.566	-0.25	-4.216	0.000	***
Years Incumbent	0.851	1.162	0.045	0.733	0.464	
Political Experience	-0.827	0.362	-0.108	-2.284	0.023	**

Model	B	Std. Error	Beta	t	Sig.	
Chamber of Congress	124.327	22.157	0.248	5.611	0.000	***
Age of Candidate	0.035	0.037	0.041	0.933	0.351	
Sex of Candidate	44.04	18.393	0.106	2.394	0.017	**

Model	B	Std. Error	Beta	t	Sig.	
Chamber of Congress	113.435	23.355	0.227	4.857	0.000	***
Age of Candidate	0.038	0.037	0.045	1.006	0.315	
Sex of Candidate	47.851	18.556	0.115	2.579	0.010	**
District in US House	-1.042	0.714	-0.069	-1.459	0.145	

Model	B	Std. Error	Beta	t	Sig.	
Ethnicity	4.688	5.027	0.043	0.933	0.351	
Sex of Canddiate	44.419	19.002	0.107	2.338	0.020	**
Age of Candidate	0.016	0.039	0.019	0.422	0.673	

Model	B	Std. Error	Beta	t	Sig.	
Total No. Candidates	11.515	5.727	0.095	2.011	0.045	**

Winner Expend 2010	7.746E-06	0.000	0.170	2.994	0.003 **
Loser Expend 2010	3.790E-06	0.000	0.107	1.956	0.051 *

Model	B	Std. Error	Beta	t	Sig.
2008 Winner Vote	-4.041E-05	0.000	-0.068	-0.632	0.528
2008 Loser Vote	0.000	0.000	0.114	1.056	0.292

Model	B	Std. Error	Beta	t	Sig.
Total Vote Cast	4.227E-05	0.000	0.256	5.841	0.000 ***
Win or Lose 2010	-40.623	14.337	-0.124	-2.833	0.005 **

Model	B	Std. Error	Beta	t	Sig.
Total Vote Cast	2.163E-05	0.000	0.131	2.331	0.020 **
Win or Lose 2010	5.009	17.229	0.150	0.291	0.771
Incumbency	-77.988	17.411	-0.237	-4.479	0.000 ***
Winner Expend 2010	7.848E-06	0.000	0.172	3.064	0.002 **

Model	B	Std. Error	Beta	t	Sig.
Age of Candidate	-0.002	0.037	-0.002	-0.045	0.964
Incumbency	-76.449	19.208	-0.232	-3.980	0.000 ***
Years Incumbent	0.755	1.127	0.040	0.670	0.503
Political Experience	-0.812	0.352	-0.106	-2.309	0.021 **
Total Vote Cast	4.002E-05	0.000	0.243	5.635	0.000 ***

Model	B	Std. Error	Beta	t	Sig.
Win or Lose 2010	-28.773	21.905	-0.088	-1.314	0.190
Vote Share	-49.057	59.777	-0.055	-0.821	0.412

Model	B	Std. Error	Beta	t	Sig.
Party of Candidate	69.449	14.521	0.214	4.783	0.000 ***
Sex of Candidate	55.861	18.657	0.134	2.994	0.003 **

Model	B	Std. Error	Beta	t	Sig.
Party of Candidate	70.664	14.054	0.218	5.028	0.000 ***
Sex of Candidate	54.358	18.057	0.131	3.010	0.003 **

Chamber of Congress	124.446	21.556	0.248	5.773	0.000	***

Model	B	Std. Error	Beta	t	Sig.	
Vote Share	-91.975	39.237	-0.103	-2.344	0.190	
Winner Expend 2010	7.996E-06	0.000	0.175	3.102	0.002	**
Loser Expend 2010	3.702E-06	0.000	0.105	1.919	0.056	*
Total No. Candidates	9.660	5.755	0.079	1.679	0.094	*

Model	B	Std. Error	Beta	t	Sig.	
2008 Winner Vote	-3.320E-05	0.000	-0.056	-0.522	0.602	
2008 Loser Vote	0.000	0.000	0.104	0.969	0.333	
Vote Share	-106.345	40.552	-0.119	-2.622	0.009	**

Model	B	Std. Error	Beta	t	Sig.	
Age of Candidate	0.031	0.038	0.037	0.823	0.411	
Chamber of Congress	125.022	22.265	0.250	5.615	0.000	***

* = .05 < p < .1
** = .001 < p < .05
*** = p < .001

Table - T-Test

T-Test				
	Mean	**N**	**Std. Deviation**	**Std. Error Mean**
Incumbency	0.47	884	0.499	0.017
Sex of Candidate	0.1697	884	0.37557	0.01263

	N	**Correlation**	**Sig.**
Incumbency & Sex of Candidate	884	0.023	0.501

Paired Differences				**95% Confidence**				
	Mean	**Std. Deviation**	**Std. Error Mean**	**Lower**	**Upper**	**t**	**df**	**Sig. (2-tailed)**
Incumbency-								

Sex of Candidate	0.29864	0.61793	0.02078	0.25785	0.33943	14.369	883	0.000

Table - Coding Scheme

Dependent Variable	Coding Scheme	Recode
Total Congressional Tweets	Coded as Raw #	0 = 0-80
		1 = 81-1340

Independent Variable	Coding Scheme	Recode
Incumbency	0 = Challenger	
	1 = Incumbent	
Incumbency experience	Coded as Raw #	
Political Experience	Coded as Raw #	0 = 0-8
		1 = 9-57
Expenditures for Winner 2010	Coded as Raw #	0 = 0-1271364.27
		1 = 1271364.28-22548567
Expenditures for Loser 2010	Coded as Raw #	0 = 0-221752.07
		1 = 221752.08-50181464
2008 Winner Vote	Coded as Raw #	0 = 0-185959
		1 = 185960-3615844
2008 Loser Vote	Coded as Raw #	0 = 0-102372
		1 = 102373-1520621
Total Number of Candidates	Coded as Raw #	0 = 0-3
		1 = 4-12
Party Identification	0 = Democrat	
	1 = Republican	
	2 = Independent	
Vote Share	Coded as Raw #	
Win or Lose 2010	0 = Lose	
	1 = Win	
Sex	0 = Male	
	1 = Female	
Age	Coded as Raw #	0 = 0-55
	999 = System Missing	1 = 56-88
Ethnicity	0 = Caucasian	
	1 = African-American	
	2 = Hispanic/ Latino	
	3 = Asian-American	
	4= Middle-Eastern	
	5 = South/Central Asian	
	6 = Native American	

	7 = Information Not Available
Chamber	1 = House
	2= Senate
District	Coded as Raw #
	0 = Senate
Total Vote Cast 2010	Coded as Raw #

Table - Crosstabs

Crosstabulation	Phi	Sig.	Cramer's V	Contingency Coefficient
Total Tweets * Political Experience	-0.102	**	0.102	0.101
Total Tweets * Winner Expend 2010	0.052		0.052	0.052
Total Tweets * Loser Expend 2010	0.069	**	0.069	0.069
Total Tweets * 2008 Winner Vote	0.037		0.037	0.037
Total Tweets * 2008 Loser Vote	-0.006		0.006	0.006
Total Tweets * Total # of Candidates	0.104	**	0.104	0.104
Total Tweets * Age of Candidate	0.007		0.007	0.007

* = .05 < p < .1
** = .001 < p < .05
*** = p < .001

Table – Variable Frequencies

Dependent Variable	N	Missing	Mean	Median	Mode	Stand. Deviation
Total Congressional Tweets	480	404	134.49	80	20	163.402

Independent Variable						
Incumbency	884	0	0.47	0	0	0.499
Incumbency experience	884	0	5.7	0	0	8.834
Political Experience	834	50	11.16	8	0	12.24
Expenditures for Winner 2010	884	0	2055176.965	1271364.27	4113372	2810743.447

Expenditures for Loser 2010	884	0	1278946.094	221752.065	0	3591929.423
2008 Winner Vote	838	46	214852.69	185959	198798	215613.211
2008 Loser Vote	832	52	112050.93	102372	0	132421.548
Total Number of Candidates	884	0	3.09	3	3	1.276
Party Identification	883	1	0.513	1	1	0.50238
Vote Share	884	0	0.5119	0.5081	1	0.18147
Win or Lose 2010	883	1	0.53	1	1	0.5
Sex	884	0	0.1697	0	0	0.37557
Age	842	42	55.3729	55	53	11.10467
Ethnicity	882	2	0.53	0	0	1.558
Chamber	884	0	1.08	1	1	0.275
District	884	0	9.37	6	1	10.517
Total Vote Cast 2010	881	3	347846.7	208103	251081	749397.059

Dependent Variable	Variance	Skewness	Kurtosis	Range	Minimum	Maximum
Total Congressional Tweets	26700.376	3.033	13.894	1340	0	1340

Independent Variable						
Incumbency	0.249	0.127	-1.988	1	0	1
Incumbency experience	78.043	1.883	3.674	56	0	56
Political Experience	149.828	0.972	0.202	57	0	57
Expenditures for Winner 2010	7.90E+12	4.642	24.739	22395786.77	152780.23	22548567
Expenditures for Loser 2010	1.29E+13	8.293	90.951	50181464	0	50181464
2008 Winner Vote	4.65E+10	10.816	152.036	3584526	31318	3615844
2008 Loser Vote	1.75E+10	6.052	46.2	1520621	0	1520621
Total Number of Candidates	1.627	2.025	8.317	11	1	12
Party Identification	0.252	-0.025	-1.933	2	0	2
Vote Share	0.033	0.755	3.784	1.83	0.1	1.94
Win or Lose 2010	0.250	-0.107	-1.993	1	0	1
Sex	0.141	1.763	1.111	1	0	1
Age	123.314	-0.057	-0.173	62	26	88
Ethnicity	2.429	3.445	11.081	7	0	7
Chamber	0.076	3.038	7.247	1	1	2
District	110.597	1.908	3.723	53	0	53
Total Vote Cast 2010	5.62E+11	7.712	75.637	9935422	64438	9999860

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