



## Research Report

## Liking Obama and Romney (on Facebook): An experimental evaluation of political engagement and efficacy during the 2012 general election

Natalie Pennington<sup>a,\*</sup>, Kelly L. Winfrey<sup>b</sup>, Benjamin R. Warner<sup>c</sup>, Michael W. Kearney<sup>a</sup><sup>a</sup> University of Kansas, 1440 Jayhawk Blvd, Bailey Hall Room 102, Lawrence, KS 66045, United States<sup>b</sup> Iowa State University, 309 Catt Hall, Ames, IA 50011, United States<sup>c</sup> University of Missouri, 108 Switzler Hall, Columbia, MO 65211, United States

## ARTICLE INFO

## Article history:

Available online 10 December 2014

## Keywords:

Facebook

Political engagement

Political information efficacy

External efficacy

## ABSTRACT

Existing research on the effect of social media use on political behavior has yielded mixed results to date, demonstrating the importance of research examining the effects of varying types of social media communication on political behavior. The experiment reported in this study provides valuable insights into the role of social media in elections. A longitudinal experiment was conducted to assess the effect Facebook use in the 2012 Presidential election had on political information efficacy, external efficacy, and political engagement. Results suggested that while political information efficacy and engagement increased over time, it was not related to following candidates on Facebook.

Published by Elsevier Ltd.

## 1. Introduction

Young voters (18–29 years old) have consistently turned out for Presidential elections in lower numbers than older age groups. The Center for Information & Research on Civic Learning and Engagement (2013) reported that only 45% of young voters participated in the 2012 Presidential election, compared to 60% of voters aged 30–44 and 68% of voters aged 45–64. This was a decrease from 2008, when young voter participation was at 51%. Although young voter turnout has often been a goal of campaigns, engaging young voters remains a difficult task. According to Bachmann, Kaufhold, Lewis, and Gil de Zúñiga (2010), many young voters do not participate in behaviors traditionally associated with political engagement, but that does not mean they are not participating at all—they just do so differently. Their research suggests that by consuming news online, the Internet can increase participation by allowing young voters to gain information and engage with others (Bachmann et al., 2010). Social network sites in particular have been touted as an important element of Barack Obama's winning campaign in 2008 (Carr, 2008). However, research on this question is mixed, with some studies suggesting Facebook does nothing to improve political engagement or efficacy (Baumgartner & Morris, 2010; Gustafsson, 2012; Kushin & Yamamoto, 2010; Woolley, Limperos, & Oliver, 2010) and others finding that it does

(Fernandes, Giurcanu, Bowers, & Neely, 2010; Gibson & McAllister, 2011). None of this research has examined the possible mechanisms for a Facebook effect. It could be group pages, the candidates' page, status updates from friends, or the facilitation of increased communication with weak ties that drive any potential Facebook effect.

The purpose of this study is to isolate the use of Facebook by candidates during an election as a possible mechanism for a social media effect. We believe candidate pages are an ideal location to focus because, as opposed to uncontrolled comments from friends and acquaintances, these pages reflect how candidates choose to frame themselves to potential voters. This study extends existing research on the role of social media in politics by exploring the possible effects of candidate communication through Facebook on the engagement and efficacy of potential voters. By using an experimental design with real candidates, this study is the first to demonstrate the potential normative value of social media.

## 1.1. Social media &amp; political communication

Hargittai and Hinnant (2008) call youth the “most plugged in” age group because they use the Internet and social media for a variety of reasons including political information seeking. By going online, young people are able to create their own political messages while also sharing content created by others (Bachmann et al., 2010). In fact, one study suggests that having a preference for digital media as opposed to print predicts online political participation for young people (Bachmann et al., 2010). But can

\* Corresponding author. Tel.: +1 (785) 864 3633.

E-mail addresses: [natpen@ku.edu](mailto:natpen@ku.edu) (N. Pennington), [kwinfrey@iastate.edu](mailto:kwinfrey@iastate.edu) (K.L. Winfrey), [warnerbe@missouri.edu](mailto:warnerbe@missouri.edu) (B.R. Warner), [mkearney@ku.edu](mailto:mkearney@ku.edu) (M.W. Kearney).

that online participation ensure offline political action? Gibson and McAllister's (2011) analysis of Facebook and the 2007 Australian federal election suggests that candidates' posts to their pages were capable of converting a small number of voters during the election. Likewise, Bakker and de Vreese (2011) found a positive relationship between online engagement and political activity offline. Together these studies demonstrate support for some positive effects of the Internet and social media on political engagement.

Overall, research findings on social media and political engagement has been mixed. While much of the literature suggests there are many benefits to social media or Internet use, for the most part the effects found for political engagement have been small (Boulianne, 2009). Some researchers argue that, at best, social media is simply another outlet for those who are already engaged offline rather than an opportunity to increase engagement among those who were otherwise unengaged (Baumgartner & Morris, 2010; Gustafsson, 2012). Research on Facebook as a site for political engagement finds that online participation is likely, but it is unclear if that translates into voting and further action offline. One study of the 2008 Presidential election found that Facebook groups for candidates facilitated political dialogue and civic engagement among college students (Fernandes et al., 2010). A similar analysis of Facebook groups, however, found them to be polarizing and partisan (Woolley et al., 2010).

Robertson, Vatrappu, and Medina's (2010) study on the posting patterns of users on candidate pages in the 2008 Presidential election found that many people who post tend to be one-time or moderate rather than high-frequency posters. The researchers suggested patterns of political behavior on Facebook are closely tied to knowledge and commitment to a candidate—the more invested a potential voter becomes the more likely they are to engage online in discussion in support of that candidate (Robertson et al., 2010). This is consistent with Boulianne's (2009) claim that those who engage through the Internet are more likely to start out more politically motivated (interested). In short, these studies indicate that those participating online are doing so because they were already politically interested and not because their online behaviors made them become engaged. All together, though these studies point to a growing trend of political discussion online, they do not provide a consistent account of whether that discussion leads to offline political engagement. Knowing this, we ask the following RQ:

*RQ1: How does following candidates on Facebook during an election effect the political engagement of Facebook users compared to those who do not follow candidates?*

### 1.2. Political efficacy

Efficacy can be a question of both political information and external political efficacy (Kaid, McKinney, & Tedesco, 2007; Kushin & Yamamoto, 2010). External efficacy is the extent to which an individual feels they have a say in/influence over their political system (Kenski & Stroud, 2006). Political information efficacy (PIE) is the degree to which voters feel they have enough information to participate in politics (Kaid et al., 2007). Gaining information should be a primary function of online political behavior, and should thus increase information efficacy. PIE is especially important because low levels of information efficacy can decrease confidence in political knowledge and prevent young people from voting in an election (Kaid et al., 2007; Tedesco, 2011).

Research on external efficacy and the Internet has been mixed. Kushin and Yamamoto (2010) suggested that there is no relationship between efficacy and using Facebook. However Kenski and Stroud (2006) found a limited positive relationship between engagement online and external efficacy. Research on PIE

(Tedesco, 2007, 2011) suggests the Internet is capable of increasing efficacy in young adults. Interactive sites are especially likely to increase information efficacy (Tedesco, 2007). Vitak et al.'s (2011) research on the 2008 U.S. Presidential election did not find a relationship between internal efficacy and Facebook use. However, Warner, McGowen, and Hawthorne (2012), Warner, Hawthorne, and McGowen (2014) found that those with high levels of PIE were more likely to use social media to engage in political discussion. While they were unable to test the causal direction of the relationship, they argued for the possibility of a recursive relationship in which political communication through social media would also increase PIE. Given the inconsistencies in past research results, we pose the following questions:

*RQ2: How does following candidates on Facebook during an election effect the political information efficacy of Facebook users compared to those who do not follow candidates?*

*RQ3: How does following candidates on Facebook during an election effect the political external efficacy of Facebook users compared to those who do not follow candidates?*

## 2. Materials and method

### 2.1. Participants

This study was completed by 135 college students recruited from introductory communication courses at two large Midwestern universities. Participants were provided with the opportunity to earn course credit in exchange for participation. The mean age of the participants was 20.56 ( $SD = 3.71$ , range 18–49,  $mdn = 20$ ). There were 85 females (63.0%) and 50 males (37.0%). The majority of the participants identified as White (82.2%), followed by Black/African-American (8.9%), Hispanic/Latino(a) (7.4%), Asian (5.2%), and Native-Hawaiian/Pacific Islander/Other (0.7%). Participants were placed into one of two groups for the duration of the study: Presidential (following Romney/Obama) or Control (following no candidates). There were 77 participants in the Presidential group (57.0%) and 58 in the Control group (43.0%).<sup>1</sup> Uneven group sizes are attributed to attrition; Time 1 reported 164 participants between the Presidential ( $n = 82$ ) and Control ( $n = 82$ ) groups and Time 2 reported 154 participants between the Presidential group ( $n = 77$ ) and the Control group ( $n = 77$ ). It was at Time 3 that significantly more individuals in the Control group failed to return to complete the survey, while the Presidential group maintained the same number from Time 2.

### 2.2. Procedures

Upon agreeing to participate in the study, participants were randomly assigned to one of two groups. Participants assigned to the Presidential group were asked to follow only Obama and Romney, while those assigned to the Control group were asked to follow no candidates from any election on Facebook (none of the participants in this group followed candidates prior to the study). For those following candidates, status updates and posts from the candidates should have appeared in their Facebook newsfeeds such that they would have been frequently exposed to the candidates' Facebook communication. Participants were asked to report how often they saw posts from candidates in their newsfeed, and a majority of participants in the Presidential group were regularly

<sup>1</sup> This data is part of a larger project that consisted of 270 participants placed into one of four groups: Presidential (Obama/Romney), Senate 1 (Warren/Brown), Senate 2 (Kaine/Allen), and Control (no candidates). Participants from the Senate 1 and Senate 2 groups were excluded from analysis for this particular study based on the questions posed.

seeing posts from both candidates (see Table A.1). At Time 2, 42.6% of participants indicated they saw posts from Obama at least once a day, while 41.2% indicated they saw posts from Romney at least once a day. At Time 3, 39.7% reported seeing posts at least once a day from Romney, while 42.6% said the same of Obama. Individuals were assigned to their group in mid-September 2012 and then asked to complete a survey at three separate time points: at the start of the study, mid-October, and the week following the election (November 11th–17th). In addition to measures of engagement and efficacy, participants were asked a number of other questions about their attitudes and behaviors unrelated to this study.

### 2.3. Measures

#### 2.3.1. Political engagement

Political engagement was assessed using measures adapted from the American National Election Study and used in previous research (e.g. Atkeson, 2003). For our purposes, engagement consisted of three factors: interest (attention to politics), participation, and discussion (frequency of political discussion). The scale consisted of twelve items: 3 interest items, 3 discussion items, and 6 participation items, which asked respondents to indicate how frequently they engaged in activities on a five-point scale ranging from never (1) to very often (5).<sup>2</sup> The scale achieved strong reliability for all three time points (see Table A.2).

#### 2.3.2. Political information efficacy (PIE)

Political efficacy was measured both in terms of information (PIE) and external efficacy. The PIE scale, developed by Kaid, McKinney, and Tedesco (2004), asked individuals whether they felt they had sufficient information to participate in politics. Items were measured on a 7-point agreement scale and achieved sufficient reliability at each time point (see Table A.2).

#### 2.3.3. External political efficacy

Participants were also asked how much influence they felt they had in the political process and to what degree their individual vote mattered. The external efficacy scale consisted of four items adapted by Kushin and Yamamoto (2010). The scale was reliable at each time point for this study (see Table A.2).

## 3. Results

To test the research questions, mixed design RM-ANOVAs were conducted for each of the three variables: political engagement, PIE, and external efficacy. For each test a within subject factor was used (for each of the three time points) with a between subjects factor of group (Control versus Presidential). Results of each analysis and answers to the research questions are discussed below.

### 3.1. Political engagement

The results of RQ1 showed no significant effect of following candidates on Facebook on political engagement. While there was a significant within subjects effect for political engagement over time,  $F(2,266) = 20.03$ ,  $p < .001$ , partial  $\eta^2 = .13$ , and a significant between subject effect for groups,  $F(1,133) = 11.20$ ,  $p < .001$ , partial  $\eta^2 = .08$ , there was no significant effect for time x group,

$F(2,266) = .19$ . As Table A.3 shows, both groups increased in political engagement over time at roughly the same rate. These results suggest that following candidates on Facebook does not have any unique effect on political engagement leading up to an election.

### 3.2. Political efficacy

No significant difference was found for RQ2 (PIE) or RQ3 (external efficacy). Mauchly's test indicated that sphericity had been violated ( $\chi^2 = 15.11$ ,  $p < .01$ ) and as a result degrees of freedom were corrected using the Greenhouse–Geisser estimates of sphericity ( $\epsilon = .90$ ). External efficacy over time was not significant,  $F(1.805,240.05) = .23$ . The between subjects effect for groups on external efficacy was also not significant,  $F(1,133) = 1.74$ . In other words, external efficacy was not related to following candidates on Facebook. Mauchly's test indicated that sphericity had also been violated for political information efficacy ( $\chi^2 = 11.52$ ,  $p < .01$ ). As a result degrees of freedom were corrected using Greenhouse–Geisser estimates of sphericity ( $\epsilon = .92$ ). While PIE increased over time,  $F(1.85,245.47) = 9.34$ ,  $p < .001$ , partial  $\eta^2 = .07$ , and the between subjects effect of group was also significant,  $F(1,133) = 4.94$ ,  $p < .05$ , partial  $\eta^2 = .04$ , the effect of time x group was not significant,  $F(1.85,245.47) = .75$ . Together, these results suggest that exposure to candidates' pages on Facebook did not increase PIE or external efficacy.

## 4. Discussion

This study offers persuasive evidence that following a candidate on Facebook does not lead to greater engagement or efficacy among young voters. Furthermore, by having users following real candidates during an election, the experimental design utilized here eliminates many of the problems that may be responsible for inconsistency in previous results. These results are important to consider as Facebook continues to be a popular outlet not only for social interaction (Facebook Newsroom, 2014) but also as a location for campaigns during an election (Williams & Gulati, 2012). Research on the subject of engagement and efficacy through new media has been mixed, with effect sizes varying and typically small (Boulianne, 2009). While some studies suggest that social media can be used for civic and political engagement (Gil de Zúñiga, 2012; Hargittai & Shaw, 2013), other research found little support for the idea that social network sites increase participation (Baumgartner & Morris, 2010; Gustafsson, 2012). Our results suggest that, at least regarding candidate-sponsored communication on Facebook, social networking sites do not increase engagement and efficacy. Boulianne (2009) argued that more experiments are needed to test the relationship between Internet use and political engagement, and our study answers this call in the specific context of Facebook.

Our study is consistent with past research, while highlighting a specific subset of Facebook communication during a campaign—the candidate's page. Indeed, most research that suggests Facebook is effective at increasing engagement or efficacy relies not on the participant following and reading the candidate's page, but rather their participation in group pages about the candidate (Fernandes et al., 2010; Woolley et al., 2010) as well as general use of social media (Hargittai & Shaw, 2013; Kushin & Yamamoto, 2010; Vitak et al., 2011). In terms of general use, measures ranged from "using Facebook" to sharing political status updates and/or engaging in political talk with friends. Another study measured use of Facebook as well as blogs and discussion boards (Kushin & Yamamoto, 2010). The inconsistency in how Facebook use has been operationalized may explain the variety in results. Vitak et al.'s (2011) survey, which suggested Facebook

<sup>2</sup> Examples of items include: *Would you say you follow what's going on in government or public affairs; How many times in the past week did you discuss politics with your family or friends; During this election cycle, how often do you go to political meetings, rallies, speeches, dinners, or things like that in support of a candidate; How often do you give money to a political party?*

use increased political participation, classified political activity on Facebook as “posting a politically oriented status update” and “becoming a fan of a candidate.” Both of these behaviors highlight an issue regarding causal inference discussed by [Gustafsson \(2012\)](#) and [Boulianne \(2009\)](#); that is, someone who is already politically interested and engaged is also more likely to post updates and seek out a candidate’s page.

Finally, our results show that following candidates on Facebook does not appear to meaningfully influence PIE or external efficacy, consistent with past research on this question ([Kushin & Yamamoto, 2010](#)). This is not unusual, as young voters tend to feel less like they have their hands on the levers of power ([Kaid et al., 2007](#)). This is also consistent with arguments about PIE – while past research found a significant relationship regarding Internet use ([Tedesco, 2007, 2011](#)) related research found no effect on internal political efficacy ([Vitak et al., 2011](#)).

## 5. Conclusions

Our results, while nonsignificant, are important for researchers who study Facebook in relation to political engagement and efficacy. There are many ways in which a person may communicate about politics through Facebook including, but not limited to, posting on their own wall, interacting with the page of a candidate, and interacting with posts made by friends. Our study has shown that following the candidate’s page alone is unlikely to increase engagement or efficacy during an election. Future research that focuses on individual posts and posts by friends may lead to different and potentially significant results. [Vitak et al. \(2011\)](#) suggest that seeing a significant amount of political activity by friends in the newsfeed may increase political participation, but additional research is needed to confirm this effect. Additionally, given that youth are the most active users of the Internet and rely on it as a source of political information ([Hargittai & Hinnant, 2008](#); [Wells & Dudash, 2007](#)), candidates in an election should consider how they are using their Facebook page as a way to reach this subset of potential voters.

### 5.1. Limitations

There are important limitations to this research that merit discussion. First, the experimental design of this study relied on participants agreeing to follow candidates over the course of almost 2 months. During the initial intake of participants, those in the Presidential group were directly linked to the pages for Obama and Romney with instructions to follow those candidates’ pages. Facebook algorithms are such that anything that is recently “liked” will stream into your newsfeed (versus those pages or friends you have not visited in awhile), which ensured that participants would see posts made by each candidate for the duration of the study. Also, by having the study occur within the month and a half leading up to the election, candidates’ would likely be posting frequently, which increased the likelihood participants would see posts ([Davis, 2014](#)). It is possible that some participants opted not to follow candidates, unfollowed them, or even hid them from

their newsfeed during the study. While there is no full check against this short of monitoring each participant’s Facebook account daily, questions were asked at each time point about if they “liked” candidates (i.e. followed their Facebook page). Any participants in the Presidential group that answered “no” were removed from the study and likewise any Control group participants that answered “yes” were also removed. Furthermore, participants indicated both Obama and Romney regularly appeared in their newsfeeds.

This study also experienced attrition as individuals dropped out for one reason or another from different groups over time. Though people dropped out between time points (see method section for discussion), those numbers could have been much higher had the study been conducted for a longer period of time. This did lead to unequal sample sizes between groups, but corrections in analysis (Greenhouse–Geisser estimates) were used to ensure an accurate assessment of results. Our convenience sample of students also limits our findings. It is possible that a more diverse group of young people would have been affected differently. For example, the college environment may provide other opportunities to learn about the election that inflated participation and information efficacy among members of the Control group. It is possible, therefore, that differences between the Control and experimental groups may have been larger in a non-student sample. We recommend that future research replicate this experiment using a random sample of young adults. Finally, while some may argue that nonsignificant results are a limitation, the importance of highlighting the lack of a relationship can be just as important as the presence of one ([Levine, 2013](#)). We believe that it is important to report results that show the lack of an effect of following candidate’s on Facebook. As [Levine \(2013\)](#) notes, “the practice of publishing only statistically significant results leads to systematic distortion of scientific evidence” (p. 272).

### 5.2. Future research

It is important that future research continues to assess the effects of Facebook use (in its varying forms) on campaigns and voters. Now that multiple studies ([Baumgartner & Morris, 2010](#); [Gustafsson, 2012](#); [Kushin & Yamamoto, 2010](#)), this one included, show that Facebook has no effect on engagement or efficacy, researchers and practitioners need to examine the specific actions candidates should take (if any) to communicate with constituents to garner votes. [Kaid et al. \(2007\)](#) point out that debates may increase political information efficacy more so than advertising, and there is potential for both to be shared through Facebook. Future research should also consider how Facebook users respond to candidates and how Internet users discuss politics through social media. Given the potential during an election year for members of one’s social network to convey political preferences, this would be an important area for further analysis.

## Appendix A

See [Tables A.1–A.3](#).

**Table A.1**  
Frequency posts viewed in newsfeed across time.

Frequency appeared in news feed	Time 2—daily % (#)	Time 2—2–6×/week % (#)	Time 3—daily % (#)	Time 3—2–6×/week % (#)
Obama	42.6 (29)	36.8 (25)	42.6 (29)	42.6 (29)
Romney	41.2 (28)	30.8 (21)	39.7 (27)	36.8 (25)



**Table A.2**  
Scale reliability.

Variable	Time 1 $\alpha$	Time 2 $\alpha$	Time 3 $\alpha$
Engagement	.89	.91	.89
PIE	.88	.88	.90
External efficacy	.91	.92	.94

**Table A.3**  
Differences between groups across time.

Variable	Time 1 M (SD)	Time 2 M (SD)	Time 3 M (SD)
Political engagement			
Presidential	2.20 (.65)	2.39 (.69)**	2.38 (.66)**
Control	1.86 (.45)	2.04 (.56)**	2.07 (.59)**
Political information efficacy			
Presidential	3.98 (1.51)	4.16 (1.53) <sup>†</sup>	4.47 (1.39) <sup>†</sup>
Control	3.51 (1.44)	3.74 (1.40) <sup>†</sup>	3.83 (1.45) <sup>†</sup>
External efficacy			
Presidential	4.48 (1.44)	4.48 (1.33)	4.51 (1.42)
Control	4.28 (1.52)	4.16 (1.54)	4.13 (1.49)

Notes: No significant effect found for time  $\times$  group.

<sup>†</sup>  $p < .01$ .

\*\*  $p < .001$ .

## References

- Atkeson, L. R. (2003). Not all cues are created equal: The conditional impact of female candidates on political engagement. *The Journal of Politics*, 65, 1040–1061. <http://dx.doi.org/10.1111/1468-2508.t01-1-00124>.
- Bachmann, I., Kaufhold, K., Lewis, S. C., & Gil de Zúñiga, H. (2010). News platform preference: Advancing the effects of age and media consumption on political participation. *International Journal of Internet Science*, 5, 34–47. <[http://www.ijis.net/ijis5\\_1/ijis5\\_1\\_bachmann\\_et\\_al.pdf](http://www.ijis.net/ijis5_1/ijis5_1_bachmann_et_al.pdf)>.
- Bakker, T. P., & de Vreese, C. H. (2011). Good news for the future? Young people, internet use, and political participation. *Communication Research*, 38, 451–470. <http://dx.doi.org/10.1177/0093650210381738>.
- Baumgartner, J. C., & Morris, J. S. (2010). MyFaceTube politics: Social networking websites and political engagement of young adults. *Social Science Computer Review*, 28, 24–44. <http://dx.doi.org/10.1177/0894439309334325>.
- Boulianne, S. (2009). Does Internet use affect engagement? A meta-analysis of research. *Political Communication*, 26, 193–211. <http://dx.doi.org/10.1080/10584600902854363>.
- Carr, D. (2008, November 9). The media equation: How Obama tapped into social networks' power. *New York Times*. <<http://www.nytimes.com/2008/11/10/business/media/10carr.html>> Retrieved 10.04.13.
- Center for Information & Research on Civic Learning and Engagement. (2013). *The youth vote in 2012*. <[http://www.civicyouth.org/wp-content/uploads/2013/05/CIRCLE\\_2013FS\\_outhVoting2012FINAL.pdf](http://www.civicyouth.org/wp-content/uploads/2013/05/CIRCLE_2013FS_outhVoting2012FINAL.pdf)> Retrieved 22.07.14.
- Davis, S. (2014). We cracked the code on how the Facebook news feed algorithm works. *The Federalist*. <<http://thefederalist.com/2014/02/20/we-cracked-the-code-on-how-the-facebook-news-feed-algorithm-works/>> Accessed 15.06.14.
- Facebook Newsroom (2014). *Company info*. <<http://newsroom.Facebook.com/company-info/>> Accessed 15.06.14.
- Fernandes, J., Giurcanu, M., Bowers, K. W., & Neely, J. C. (2010). The writing on the wall: A content analysis of college students' Facebook Groups for the 2008 presidential election. *Mass Communication and Society*, 13, 653–675. <http://dx.doi.org/10.1080/15205436.2010.516865>.
- Gibson, R. K., & McAllister, I. (2011). Do online election campaigns win votes? The 2007 Australian "YouTube" election. *Political Communication*, 28, 227–244. <http://dx.doi.org/10.1080/10584609.2011.568042>.
- Gil de Zúñiga, H. (2012). Social media use for new and individuals' social capital, civic engagement and political participation. *Journal of Computer-Mediated Communication*, 17, 319–336. <http://dx.doi.org/10.1111/j.1083-6101.2012.01574.x>.
- Gustafsson, N. (2012). The subtle nature of Facebook politics: Swedish social network site users and political participation. *New Media & Society*, 14, 1111–1127. <http://dx.doi.org/10.1177/1461444812439551>.
- Hargittai, E., & Hinnant, A. (2008). Digital inequality: Differences in young adults' use of the Internet. *Communication Research*, 35, 602–621. <http://dx.doi.org/10.1177/0093650208321782>.
- Hargittai, E., & Shaw, A. (2013). Digitally savvy citizenship: The role of Internet skills and engagement in young adults' political participation around the 2008 presidential election. *Journal of Broadcasting & Electronic Media*, 57, 115–134. <http://dx.doi.org/10.1080/08838151.2013.787079>.
- Kaid, L. L., McKinney, M. S., & Tedesco, J. C. (2004, November). *Political information efficacy and younger voters*. Paper presented at the annual meeting of the National Communication Association, Chicago, IL.
- Kaid, L. L., McKinney, M. S., & Tedesco, J. C. (2007). Political information efficacy and young voters. *American Behavioral Scientist*, 50, 1093–1111. <http://dx.doi.org/10.1177/0002764207300040>.
- Kenski, K., & Stroud, N. J. (2006). Connections between internet use and political efficacy, knowledge, and participation. *Journal of Broadcasting & Electronic Media*, 50, 173–192. [http://dx.doi.org/10.1207/s15506878jobem5002\\_1](http://dx.doi.org/10.1207/s15506878jobem5002_1).
- Kushin, M. J., & Yamamoto, M. (2010). Did social media really matter? College students' use of online media and political decision making in the 2008 election. *Mass Communication and Society*, 13, 608–630. <http://dx.doi.org/10.1080/15205436.2010.516863>.
- Levine, T. R. (2013). A defense of publishing nonsignificant (ns) results. *Communication Research Reports*, 30, 270–274. <http://dx.doi.org/10.1080/08824096.2013.806261>.
- Robertson, S. P., Vatrappu, R. K., & Medina, R. (2010). Off the wall political discourse: Facebook use in the 2008 U.S. presidential election. *Information Polity*, 15, 11–31. <http://dx.doi.org/10.3233/IP-2010-0196>.
- Tedesco, J. C. (2007). Examining Internet interactivity effects on young adult political information efficacy. *American Behavioral Scientist*, 50, 1183–1194. <http://dx.doi.org/10.1177/00027642073000041>.
- Tedesco, J. C. (2011). Political information efficacy and internet effects in the 2008 U.S. presidential election. *American Behavioral Scientist*, 55, 696–713. <http://dx.doi.org/10.1177/0002764211398089>.
- Vitak, J., Zube, P., Smock, A., Carr, C. T., Ellison, N., & Lampe, C. (2011). It's complicated: Facebook users' political participation in the 2008 election. *Cyberpsychology, Behavior, and Social Networking*, 14, 107–114. <http://dx.doi.org/10.1089/cyber.2009.0226>.
- Warner, B. R., Hawthorne, J., & McGowen, S. T. (2014). Maligned youth or political activists?: Young citizen political engagement using social media. In J. A. Hendricks & D. Schill (Eds.), *Presidential campaigning and social media*. New York, NY: Oxford University Press.
- Warner, B. R., McGowen, S. T., & Hawthorne, J. (2012). Limbaugh's social media nightmare: Facebook and Twitter as spaces for political action. *Journal of Radio & Audio Media*, 19, 257–275. <http://dx.doi.org/10.1080/19376529.2012.722479>.
- Wells, S. D., & Dudash, E. A. (2007). Wha'd'ya know? Examining young voters' political information and efficacy in the 2004 election. *American Behavioral Scientist*, 50, 1280–1289. <http://dx.doi.org/10.1177/00027642073000053>.
- Williams, C. B., & Gulati, G. J. (2012). Social networks in political campaigns: Facebook and the congressional elections of 2006 and 2008. *New Media & Society*, 15, 52–71. <http://dx.doi.org/10.1177/1461444812457332>.
- Woolley, J. K., Limperos, A. M., & Oliver, M. B. (2010). The 2008 presidential election, 2.0: A content analysis of user-generated political Facebook groups. *Mass Communication and Society*, 13, 631–652. <http://dx.doi.org/10.1080/15205436.2010.516864>.