Facebook and Political Engagement: A Study of Online Group Membership and Offline Political Engagement

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Abstract

In what ways do online groups help to foster political engagement among citizens? We employ a multi-method design incorporating content analysis of online political group pages and original survey research of university undergraduates (n = 455) to assess the effects of online group membership on political engagement measured through political knowledge and political participation surrounding the 2008 election. We find that participation in online political groups strongly predicts offline political participation by engaging members online. However, we fail to confirm that there is a corresponding positive effect on political knowledge, likely due to low quality online group discussion.

(Word count: 95)
Introduction

New media is a growing force in the study of civic engagement. There are many levels of analysis within the discussion of new media effects ranging from the global economy to personal use of the Internet. Our research exists on the level of the democratic divide (Norris, 2001), where researchers study individual-level usage of the Internet and analyze its effect in terms of civic engagement. We join an active discussion of whether political Internet use will be helpful, harmful, or irrelevant in its effects on civic society and political engagement.

There is some controversy concerning the effects of the Internet on political engagement. Several scholars argue that general Internet use erodes engagement and demobilizes citizens (Nie, 2001; Putnam, 2000; Ansolabehere and Iyengar, 1995), while many are optimistic about the ability of political Internet use to increase political participation, (Cho et al., 2009; Rojas and Puig-i-Abril, 2009; Mossberger, Tolbert, and McNeal, 2008; Shah et al., 2005; Xenos and Moy, 2007), knowledge (Xenos and Moy, 2007), and civic engagement through social capital (Valenzuela, Park and Kee, 2009; Jennings and Zeitner, 2003; Norris, 2001; Shah, Kwak, and Holbert, 2001).

Understanding the influence of the Internet, and especially new venues and capacities for social interaction, on offline political engagement is especially pertinent to understanding younger citizens, who are more active online than previous generations. In 2007, Pew reported that 93 percent of teens use the Internet, and as Internet use goes up, participation on social networking sites increases as well (SNS): “more [teens] than ever are treating [the Internet] as a venue for social interaction—a place where they can share creations, tell stories, and interact with others” (Lenhart, Madden, Macgill and Smith,
2007). If we want to understand whether heightened Internet use has a positive or negative impact on political engagement of youth, it is important for our analysis to incorporate measures of different types of social interactions online. As time goes on, we are developing more robust measures for online activities and effects through increased research efforts related to the effects of new media. This paper is an early attempt to accurately capture measurements of these online social interactions.

The proliferation of online venues for all purposes, from social interaction to consumerism, suggests that Internet use alone is too blunt a measure. Recently, researchers have begun to examine specific forms of “political use” of the Internet and SNS, an approach we find to be more indicative of the mechanisms through which new media engages society. This project contributes to this line of more specified research by further exploring how online political group membership affects offline political engagement of youth. Political groups are defined as any social connection shared by individuals where political discussion and interaction influence their behavior. Political groups have long existed offline through formal group organizations and even informal interaction amongst friends. However, new media is providing opportunities to engage citizens in political groups in ways that we have never seen before.

Focusing on the social networking website Facebook, we use a multi-method design to learn more about the content of online political groups and potential influence they have on political engagement. Political engagement is defined here as offline political participation and political knowledge. We begin with analysis of original survey data (n = 455) to measure membership in online political groups and levels of offline political activity and knowledge. We find that increased online political group
membership predicts increased levels of offline political participation but not necessarily increased levels of political knowledge. To elaborate on these findings, we conduct a content analysis of group pages and group wall commentary (walls are a shared social space where group members post messages), where we find information quality to be quite low and relatively opinionated rather than information rich. Through survey analysis, we confidently establish the causal relationship between online groups and political engagement, while the content analysis corroborates this relationship, measuring how group participation naturally occurs across a random sampling of online group pages. We conclude with a discussion of our findings and suggest direction for future research in this area.

*Online Political Activity Effects*

Certain uses of the Internet and new media yield civically redeeming effects in users. Mossberger, Tolbert and McNeal (2008) find that chat rooms, political email correspondence, and online news exposure predict higher voting rates. Shah, Kwak and Holbert (2001) demonstrate that information exchange over the Internet fosters civic engagement, trust, and life contentment in younger generations, while social recreation on the Internet is negatively correlated with trust and life contentment. Both of these studies highlight the more deliberative uses of Internet, and more specifically, political discussion. McLeod, Scheufele and Moy (1999), Shah et al. (2007) and Cho et al. (2009) find interpersonal processes, such as discussion, are central to learning and action, perhaps licensing the positive effects on civic engagement and participation.
SNS often propagate deliberative activity through their use of discussion walls, information sharing, and networking. One function of SNS that has received little attention so far is the ability to easily create and join groups. Social scientists have celebrated the advantages of group membership and associations for decades and some have prescribed participation in groups as an “all-purposive elixir for the ills of society” (Dekker and Uslaner, 2001). Existing research demonstrates that group membership encourages trust (Brehm and Rahn, 1997; Jennings and Stoker, 2004), democratic values, and the development of important political skills (McFarland and Thomas, 2006; Fowler, 1991). Furthermore, membership in a group provides necessary motivation and incentive to be politically informed (Coleman, 1988; Fishkin, 1991). Indeed, described as a “nation of joiners” in the 18th century by foreign visitor Alexis de Tocqueville (1990 [1840], p. 118), political engagement in the U.S. has historically been spurred by group membership.

In one of the more crucial calls for attention to groups, Putnam (2000) details an alarming trend amid group membership and civic engagement in the United States; as membership in civic groups decreases so too does civic engagement. Putnam believes the stock of social capital underpinning civic engagement is built up though participation in voluntary organizations, largely offline. Yet the Internet is changing the ways in which we communicate, organize, and socialize (Bimber, Flanagan, and Stohl, 2005; Hampton and Wellman, 2001; Rich, 1999; Klein, 1999; Shah et al., 2005). More specifically, the Internet revolution has brought about the inception of online groups that appear to resemble offline groups in function, if not in form.
The observed decline in offline groups paired with growth among online groups raises an important question for civic engagement and new media: In what ways are the benefits of online group participation comparable to the benefits of offline group participation? In this paper, we anticipate advancing scholarship on the effects of online political group membership specifically in terms of political engagement. Heeding advice from Berger (2009), we avoid measuring effects on civic engagement broadly. We focus more directly on political engagement in the form of political participation during the 2008 election and political knowledge acquisition. We argue that online group membership is likely to encourage offline political participation, but is unlikely to correspond with subsequent and ubiquitous gains in political knowledge among joiners.

*Group Membership as a Mechanism for Political Engagement*

Group membership is thought to encourage political engagement though a number of mechanisms. First, group membership can provide an opportunity for members to discuss politics. Discussion is thought to be integral to feelings of efficacy among citizens, leading to higher rates of political activity (Cho et al., 2009; Andersen and Hansen, 2007; Delli Carpini, Cook and Jacobs, 2004; Gastil and Dillard, 1999; Delli Carpini and Keeter, 1996; Fishkin, 1991; Robinson and Levy, 1986). Discussion in a group setting can also promote learning by necessitating the expression of views (Taber and Lodge, 2006), and forcing more thoughtful consideration of viewpoints (Huckfeldt, 2007; Eveland et al., 2005; Eveland, 2004). Benhabib (1994, p. 30-31) notes that, “when presenting their point of view and position to others, individuals must support them by *articulating good reasons* in a public context to their co-deliberators. This process of
articulating good reasons in public forces the individual to think of what would count as a good reason for all others involved.” Eveland (2004) finds that anticipation of discussion that is counter to one’s own viewpoint motivates individuals to become more informed and elaborate on their own opinions. Reasoning, in this general sense, promotes learning (Cho et al., 2008).

However, deliberation effects are precarious. Studies have found the diversity of discussion to be imperative to knowledge gains, whereas homogenous discussion or one-sided arguments are detrimental to knowledge gains. This is especially evident in the framing literature which finds that availability of counter-arguments limits framing effects and encourages systematic processing (Chong and Druckman, 2007; Sniderman and Theriault, 2003; Nelson and Druckman, 2003). Diverse discussion is important in helping people to develop skills that encourage deeper understanding, yet message exposure is only as varied as a person’s network (Gastil, Deess, and Weisler, 2002; Scheufele, 2002; Nisbet and Scheufele, 2004).

When most people discuss politics, “their conversations usually take place within primary groups of family and close friends - that is, among like-minded people who largely resemble each other socially and politically” (Price and Capella, 2002; see also Wyatt, Katz, and Kim, 2000). Mutz and Martin (2001, p. 99) find cause for concern as they show a trend toward ever-homogenizing discussant networks, however, they go on to note that our media environments are more diverse than our real ones and that when compared to personal interactions, people have less ability and desire to exercise selective exposure on media content (see also Brundidge and Rice, 2009). Additionally, some have taken the hopeful view that new, albeit intangible, venues unrestrained by
geography will enable diversified discussion groups and a more engaged citizenry (Kollock and Smith, 1999) or that online messaging will lead to more civic participation (Shah et al., 2005).

The Internet exists as a potential emporium of diverse information where people can communicate freely, without the restriction of time and space. However, selection capabilities and little regulation of material available online might instead produce groups with members who share similar values and ideas; in other words, the Internet may lead to a heightening of selective exposure. By the sheer choice lent to Internet users, those surfing the web can choose to only join groups and discuss politics with like-minded others (Bimber, 2008). Thus, although deliberation is a characteristic of groups both online and offline, deliberative criteria—that the participant have an open mind, and that there be diversity among messages—are not an necessarily organic characteristics of group participation (Barabas, 2004). We presume, reflecting on the literature, that although spatially broad, online groups may tend to be ideologically narrow (Sunstein, 2001).

Additionally, discussion that takes place online is asynchronous; although a number of social networking sites have a forum or application for chatting and discussion, most dialogue takes place on message boards and over the course of a few days or months. For instance, a group member can post a comment on a message board and either never returns to see if others have responded, or returns several days later to continue the conversation. Either way, this type of discussion adds dimension to our traditional understanding of deliberation, acting as a potential detriment to the learning process.
Another valuable component of group membership that may or may not be present online is accountability. Olson (1965) famously argues that face time is an important component in the enforcement of member participation. By ensuring individuals will physically run into each other, small groups will enhance membership participation. Correspondingly, larger groups are less likely to incentivize member participation and individual accountability. The Internet, alternatively, does not necessarily bring people into physical contact or require as much commitment from its members and this has potentially harmful associated effects (Putnam, 2000). If we apply this logic to group membership online, it suggests that online groups may be unlikely to hold members accountable. Members of online groups usually do not meet face to face, and members of online groups can also choose to be anonymous, or have multiple or false identities (Nie and Erbring, 2000; Kolko and Reid, 1998). This can have negative effects on one’s online community. As Kolko and Reid (1998) suggest, individuals who are anonymous or have multiple identities online are less likely to maintain their online identities, and as a result, may be unlikely to contribute in a meaningful way to an online community. These findings also suggest that elements of political engagement may be hindered as a result. In conclusion, several attributes of offline groups, such as face-to-face communication, physical group membership, and fluid personal discussion are not staples of online membership, lending to the overall need of increased study of this online function.

As the scholarship now stands, we have many competing as well as consistent expectations of the influence of online group activity on political engagement. Early work quickly called into question the exchange of face-to-face interaction for online
correspondence, but later work has begun to identify areas in which the two forms are similar and even complementary (Krueger, 2002; Norris and Jones, 1998; Shah et al., 2001; Shah, McLeod, and Yoon, 2001; Wellman, Haase, Witte, and Hampton, 2001; Williams, 2007). As we continue to move forward in understanding the effects of online activity, greater attention must be paid to the type of information being exchanged, the specific venues being used, and the quality of opinions being expressed online. We move this line of research forward by opening up “social networking sites” and looking inside at the specific ways in which groups within these sites foster activities that may relate to political participation and knowledge. We focus specifically on the social networking site, Facebook, which as of late 2010, is the most visited website on the Internet. Through detailed analysis of the information exchanged among online groups, online group membership rates, and measures of political engagement and knowledge of group members on Facebook, we are able to empirically explore the theoretical expectations of online group participation.

Facebook

Facebook is an online medium that lets users interact with each other by sharing information about themselves via personal profiles. Users share their information by “friending” others and allowing them access to their profile. As of Winter 2010, Facebook is currently considered the largest online social network with over 500 million active users, surpassing other online social networks such as MySpace, Friendster, and Bebo. Originally created by Harvard University students in February 2004, Facebook was modeled after paper pages that Harvard circulated profiling staff, faculty, and students.
Facebook originally began as a service only offered to universities, but continually expanded its availability until Facebook allowed global registration in September 2006. Since then, Facebook has grown rapidly, becoming especially popular among younger generations and college students.

Although the premise of Facebook rests with sharing information via an online profile that contains basic information about the user, there have been important additions to the site that have fundamentally changed how users interact with others on Facebook. Facebook introduced the “groups” application in September 2004 as one of its basic features. Groups allows users to share common interests with each other by providing a common space where users can meet others interested in a specific topic, disseminate information about that topic, and have public discussions relevant to that topic. The group application was one of the earliest and still remains one of the most pivotal features contributing to the interactive nature of Facebook. Facebook has also made the wall (where users can post messages on other people’s profiles), notes (where users can share their views with blog-like posts), share (where users can post links to external websites on their profile), and fan pages (where users can show support for a public figure) features, enabling users to continually interact with each other in a variety of different ways.

Research Methodology

This is a study of a specific application of SNS, mainly online political group participation on Facebook. Of the work to date that has focused on SNS (Ellison, Steinfield, and Lampe, 2007; Zywica and Danowski, 2008; Lewis, Kaufman, and Christakis, 2008) we were only able to find one study that has looked at group...
participation through SNS and finds a positive correlation between online political group participation and offline political participation (Valenzuela, Park and Kee, 2009). Our study advances the field by attempting to establish a causal relationship between online political group membership on Facebook and offline political engagement. To do this, we use a multi-method design, which employs a survey and two-stage model to test our primary hypotheses. In the interest of adding depth to the findings, we add to the study by conducting a content analysis to investigate the manner in which online group membership discussion facilitates political engagement.

Very few large, national surveys include measures for the specific types of SNS usage that we would like to explore in our study. Consequently, we designed a survey that allows us to open up general SNS usage and learn more about the specific ways in which people use these SNS applications as well as the political and civic ramifications of their usage. We sample undergraduate college students who are heavy users of Facebook, thus making them an important sample population to examine for potential effects. Based on this survey we can begin to gain a better understanding of which applications on Facebook, if any, are civically virtuous.

Political participation and political knowledge are critical components of general political engagement; therefore, we examine these as our primary dependent variables. Of the available Facebook applications, we specifically expect that online group participation will facilitate offline participation because online groups promote activity that transfers readily to the offline world. An individual who joins an online group does not necessarily have to be interested in politics. Rather, shared interests and social concerns may push an individual to interact and learn about politics through online
Online groups allow members to express their opinion through posts and to engage on many levels with the group discussion and information sharing. It is not uncommon to expect that this type of interaction leads to offline political participation. For example, individual group members may learn that an organization is sponsoring a local meeting, the location and time of a political rally, a link to an online petition, or members may generally feel obligated to take action after participating in online groups. These activities provide a psychological connection with political activity online that we predict will stimulate political empowerment offline. An individual may be empowered through interaction or information they found online, that they might not otherwise have been exposed to.

H1: Online political group membership leads to increased levels of offline political participation.

We would also expect that the information sources that are provided for members to access and share would increase levels of political knowledge if fully exploited and informed. Where, in face-to-face interactions people are physically held accountable for their statements and conversation, we believe that the anonymity or lack of personal interaction online may lead to lower quality information sharing and provision. Because it is very easy to post comments online, and because people can do so without much social risk, we expect to find a paucity of high quality information being shared on group walls. Therefore we expect to accept the hypothesis of H2 and find no correlation between political group membership and increased levels of political knowledge.
H2: Online political group membership has no effect on levels of political knowledge.

Thus, we expect to find that political groups on Facebook are increasing political participation among members, yet have no effect on political knowledge. To support this, we conduct a two-part study. In the first part of the study, we use a survey to assess the relationships between political group participation on Facebook and political engagement. The second part of the study focuses on a content analysis of political groups to provide rich detail about how Facebook users interact in political groups and the quality of information and deliberation users are exposed to.

Survey Analysis:

For the first portion of the study, we administer a survey to college undergraduates at a public university in California (n = 455). The survey allows us to gather cross-sectional data about Facebook usage among a relevant population including new measures for distinctly political versus non-political usage. We survey students in three large political science classes; two lower division courses and one upper division course during the Spring quarter of 2009. Nearly 70 percent of the students in the sample are, or intend to become, Political Science majors. It is reasonable to assume that this sample might be more politically engaged on average than a random sample of students. The survey takes roughly 15 minutes to complete and all surveys were administered over the course of one week. This study is based on a convenience sample, which invariably raises questions about the external validity of the findings (Sears, 1986). However, the
sample is not homogenous on key demographic variables\(^2\) and is easily comparable to the wider university population and similar state public universities. We do not claim the findings on participation and knowledge to be generalizable to the wider population. We do believe, however, that it is reasonable to assume the effects would not differ drastically across other groups, specifically younger generations who use social networking sites in large numbers.

We suspect that there may be some simultaneity between people who choose to join online political groups and people who engage politically. While endogeneity is a potential problem that we anticipate, we run an ordinary least squares (OLS) regression as a starting point for determining the effects of group membership on political participation and political knowledge. To address the problem of endogeneity, we also use a two-stage least squares regression (2SLS). Furthermore, we do recognize some limitation in the methodology of this design as causality between online political groups and offline political participation is better established through a panel study.

**Measures**

Our independent variable is a self-identified measure of how many political groups the respondent is a member of as a proportion of their total amount of group membership (\(PG\)), ranging on a 5-point ordinal scale from none to all. The two primary dependent variables that are of most interest are offline political participation (\(PP\)) and political knowledge (\(PK\)). To measure offline political participation, we create an aggregate scale composed of ten modes of political participation coded on a four-point

\(^2\) The sample was compared on ethnicity and gender, which are the only relevant demographic variables that are made publically available by the university.
scale indicating participation frequency. The political participation scale ranges from 0-40 or low participation to high participation (M = 19.29, SD = 4.18, \( \alpha = .733 \)). The measure for political knowledge is also an aggregate scale composed of dummy variables for correct answers to 11 political knowledge questions. The political knowledge scale ranges from 0-11 or low knowledge to high knowledge (M = 9.47, SD = 1.64, \( \alpha = .621 \)).

The model for political participation and political knowledge is:

\[
(PP), (PK) = \alpha + b_{1PG} + b_{2S} + b_{3A} + b_{4Y} + b_{5I} + b_{6ID} + b_{7R} + b_{8PI} + b_{9ON} + b_{10P} + \varepsilon \quad (1.1)
\]

In the above equation, a number of measures are used to control for socioeconomic, demographic, and political factors that are thought to have an influence on participation and knowledge (Rosenstone and Hansen, 1993; Verba, Schlozman, and Brady, 1995). To control for the possible impact of sex on political participation we include a dummy variable for sex (S), coded 0 for male and 1 for female. We include a scale for age (A) as well as an ordinal measure for year in school (Y), coded low to high.

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3 The participation scale includes measures of whether the subject voted in 2008, plans to vote in the 2010 election, tried to persuade someone to vote, donated money to a political candidate or campaign, worked as a paid employee for a candidate or campaign, worked as a volunteer for a candidate or campaign, attended a political rally, stuck a campaign sticker on window or car, participated in a boycott, and signed a petition.

4 The knowledge scale includes measures for whether the subject provided the correct response to the following 11 questions provided by Delli Carpini & Keeter, 1996: which party holds the majority in the House of Representatives, vote required to override a presidential veto, which party is more conservative, whose responsibility is it to determine if a law is constitutional, how many terms can the President serve, how many members are on the Supreme Court, what political office is held by Nancy Pelosi (write-in), can you vote online in a presidential election, do you need to pass a literacy test to vote in CA, which 2008 presidential candidate most favored universal health care, which 2008 presidential candidate most favored troop reduction in Iraq.

5 Age is the first of three variables which pose potential problems in reference to the assumptions of a regression. Age has a skewed distribution toward younger individuals within the sample. This reflects the limitation of a sample of college students. In addition, our variables measuring political interest and online news gathers are also skewed, reflecting a sample that is more politically interested than expected. While our study recognizes the limitations of the sample, we did conduct the OLS and 2SLS by transforming these three variables. When we conduct the analysis with these transformations, our results do not significantly change as the magnitude, direction and significance of the relationships remain the same. We
We ask subjects to report their family income ($I$) because this is likely a better indicator of their socioeconomic status than the income of a student. We measure family income on an ordinal scale ranging from “under $50,000” to “over $250,000” in $50,000 increments, with 6 representing over $250,000. We measure party identification ($PI$) using a 5-point scale moving from “strong Democrat” to “strong Republican,” with a score of 3 coded for “independent.” Highly differentiated racial diversity proved to be an insignificant factor predicting participation and knowledge, so we use a basic dummy variable ($R$) here where “white / non-Hispanic” is coded as 1 and all else coded as 0. We measure political interest ($PI$) using a 7-point scale indicating the respondent’s self-identified overall interest in politics. Lastly, recent work suggests that online news gatherers ($ON$) who use Internet websites for political information, like Google and Yahoo News, are more likely to vote (Mossberger, Tolbert, and McNeal, 2008), and we suspect that privacy ($P$) online may also correspond with political reclusiveness, so we include a dummy variable for online news readers and a measure for online privacy that ranges on a 4-point scale from few restrictions to many restrictions that a respondent places on their Facebook profile.

We first test the hypotheses that increased political group membership on Facebook predicts offline political participation and political knowledge by using a multivariate OLS regression. However, we also use a 2SLS regression to control for any simultaneity between our primary variables. In the first stage of the two stage least squares equation for both political participation and political knowledge, we instrument political group membership ($PG$) using:

[Note: The text continues with the regression analysis and further details not shown here.]
\[ PG = \alpha + b_1LM + b_2FL + \epsilon \]  

(1.2)

We use two variables as instruments for political group membership that correlate with increased group membership but are not politically motivated: how long respondents have been Facebook members \((LM)\), calculated on a 5-point scale from “less than 6 months” to “more than 3 years” and how frequently respondents log on to Facebook \((FL)\) calculated on a 6-point scale from “never or almost never” to “I always stay logged on.”\(^6\) The second stage is similar to Equation 1.1. As proper instruments in 2SLS, the instruments are independently correlated with the independent variable but not the dependent variable.\(^7\)

**Content Analysis**

In the second portion of the study, through in-depth content analysis of political groups, we gain a better understanding of the type of information and discourse to be found among these online groups. Survey analysis can only tell us so much about the nature of online group membership. The richness of information provided to us by looking directly at online group discussion gets to the central aspect of online social interaction. In the survey analysis, we argue that political information levels will remain unaffected by increased political group membership. Should the survey analysis confirm our hypothesis, then the content analysis should underscore why this seemingly contradictory effect occurs. By analyzing the content and quality of information posted to

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\(^6\) Users who “always stay logged on” are presumed to be active users throughout the day. They stay logged onto Facebook in order to intermittently check the service whenever they are online.

\(^7\) Robust instruments are notoriously difficult to identify and employ. Further testing through the Cragg-Donald Wald weak identification test reveals that these estimators are categorically weak. However, we repeated the regression analysis with the instrumental variables using a limited information maximum likelihood regression with a conditional likelihood ratio test that is robust to weak estimators and conclude very similar findings to those found in the 2SLS regression (the results are reported in appendix C).
these online political groups, we are able to assess the information available through online groups and the merits of political knowledge acquisition through this medium.

We analyzed the content of 39 randomly selected political Facebook group pages, accounting for numerous dimensions of information content and quality available through these online groups. Political groups are identified on Facebook as a distinct category, called “Politics.” The groups which the respondents to the survey identified as political are presumably included in this sample. We coded the information for these political group pages (Cohen's Kappa = .71), gathering general group information including: number of news posts, links posted by the group administrators, shared videos, advertised events, and group wall discussion. Groups usually allow for members to post comments on the “wall” to be viewed by members and non-members alike. These comments on the group wall are seen as a proxy for discussion that might occur in face-to-face interaction in a traditional offline group. We randomly selected 20 comments from each wall (n = 780) to be coded according to information content, comment length, opinion strength, and overall information quality.8

[Insert Table 1 about here]

Results

Table 1 presents the findings from the OLS and 2SLS models with political participation as the dependent variable (H1).9 The political participation scale is coded so that higher scores are associated with higher probabilities of participating offline. This table indicates that our primary independent variable, political group membership

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8 We used a random number generator to produce 20 numbers ranging from 1 to n. We then scrolled through the wall pages to find the corresponding wall post and pasted it onto a sheet for our research assistants to code.
9 The first-stage models for both political participation and political knowledge are reported in appendix A and B, respectively.
through Facebook, has a significant effect on offline political participation after controlling for other influential factors. In fact, in the first stage, a respondent indicating “all” versus “none” of their Facebook groups as political is likely to score higher on our participation scale by 7 points, or the equivalent to performing two political activities with the highest frequency. We also confirm this relationship in the two-stage regression model.

Table 2 examines political knowledge as the dependent variable (H2), where we observe that online group membership through Facebook is a significant but weak predictor of political knowledge in the OLS model. The difference between a respondent with no political group memberships and one with all political group memberships is the equivalent of answering slightly more than one additional political knowledge question correctly. When we use the two-stage model, the predicted probability of group membership fails to achieve statistical significance, suggesting that the relationship observed in the OLS model is endogenous.

As such, it seems that we can make the case that membership in online political groups via the Facebook platform encourages offline political participation, even when the simultaneity problem is taken into account. At the very least, we can be confident that online groups encourage offline political participation and therefore we confirm H1. When we turn to political knowledge, however, H2 is supported in the 2SLS model which controls for simultaneity showing that political group membership does not confidently bolster levels of political knowledge. Therefore, while political engagement encompasses both political participation and political knowledge, our study cannot
confirm the fact that Facebook creates fully politically engaged participants, rather it seems that it encourages political participation but not a corresponding effect on political knowledge. To understand more about why this might be the case, we turn to the content analysis of the group pages.

[Insert Table 3 about here]

Table 3 shows that the content of Facebook political pages provides potential sources of information, particularly in self-guided formats, which members can optionally take advantage of. For example, 62 percent of the pages we coded provided additional contact information for the group outside of Facebook and 82 percent posted additional website links in the designated “links” space. In addition, a large number of the groups posted news links, photos, and discussion topics for the visitors to engage in online. Administratively, these political pages seem to provide a wealth of information where members have the opportunity to seek and learn more about their group. While it seems that political groups have the ability to encourage the acquisition of political knowledge, performing a content analysis of the discussion among group members within these groups can highlight whether or not members take advantage of these opportunities.

[Insert Figure 1 about here]

Figure 1 presents our findings across three critical dimensions among the 780 wall posts randomly selected for analysis. We presume that members who are politically knowledgeable should be having online discussions that are well informed, characterized by strong opinions, and of high-information quality. Even if all members are not necessarily politically knowledgeable, if the discussion between members is reasonably
well-informed, then the discussion should encourage the attainment of political knowledge.

Overall the informational content and quality of discussion on the walls was very low. Forty-one percent of the wall posts were “not very” informative posts, which are described as posts that did not share any new information. Only 16 percent were classified as sharing “very” thoughtful information within the post; These posts are coded as those that offered a new perspective or information to the group. The strength of the opinion offered in the post was coded not opinionated or neutral, low opinion, or high opinion. Low opinion posts are those that have a perspective on the issue at hand, as contrasted to high opinion posts which have a strong perspective by inciting people or advocating for action. Overwhelmingly, 523 of the 780 (67 percent) posts offered low or high opinion strengths suggesting that the general discussion in Facebook groups is opinionated. The wall posts were also coded for their overall information quality, ranging from “Poor” where the information was inaccurate, incoherent, or did not support thought with evidence, to “Excellent” where the post supports their thought with evidence and/or thoughtful explanation. The overall quality of the posts we coded was poor and only four percent were thought to offer excellent quality discussion.

Our content analysis indicates that political Facebook group users often do not share much new information and the information they do share tends to be somewhat inaccurate, incoherent, or not very well supported with evidence. As a forum for people to easily engage and share their opinions, online groups are beneficial; however, as a forum to learn new political information online groups are ineffective due in part to low quality wall discussion. The survey analysis suggested that while online group
membership in political groups encouraged political participation, it had no effect on political knowledge. The content analysis suggests that while group members may feel more empowered or efficacious through the opportunity presented by online participation in groups, the low quality of group interaction does not encourage members to learn new political information.

Discussion

This research and its findings are significant on three important levels. First, we illustrate the need to start looking deeper into SNS usage, and political Internet usage more generally. Social network sites are not a use in themselves, as much as they are a platform for various applications that have important implications for studying how people interact today. This study highlights one SNS application from one specific SNS at one point in time. We investigate a specific service provided by Facebook through which groups can form and function in ways very similar to offline groups. While we show that Facebook groups foster political participation, Facebook and other SNS have created new ways to bridge the gap between users through groundbreaking interactive technologies. These groundbreaking technologies provide ample opportunity for other scholars to investigate Facebook, SNS sites, and their effect on political engagement.

Second, we show that online groups produce similar effects to offline groups, specifically in their ability to foster political engagement. The 2008 election solidified the importance of the Internet broadly, and SNS specifically, as critical elements of politics and campaigning today. We find that Facebook allows for the creation of online political groups that provide many of the benefits that we have known face-to-face groups to
provide for decades. In this sense, Facebook is... fostering political engagement. However, this finding points to other interesting questions regarding the nature of online groups. While we know online groups have the potential to encourage offline political engagement, future research should focus on how and whether online groups change political opinions and attitudes. The full extent of the effect of online groups on political behavior needs to be thoroughly examined as the effects of online groups can have potentially important ramifications for the political process.

The last point we make emphasizes the dual nature of the findings. The fundamentals of democracy assume a knowledgeable public, one that is capable of representing its own self-interest effectively. A healthy democracy, then, should see tandem movement between political knowledge and political participation. Here we find that while online group membership predicts increased levels of offline political participation, we do not see an equally significant effect on levels of political knowledge. The content analysis of group wall posts offers a suggestion for why this might be the case. The information content and quality of most wall posts were found to be very poor, generally lacking support for their claims, incoherent, or simply opinionated. In other words, group members are exposed to little new or well-articulated information about the political causes around which these groups form. The information is more likely to be reinforcing and therefore mobilizing, but not enlightening and therefore educational.

Through content analysis of online group pages coupled with a survey of high-level Facebook users, we offer a step forward in understanding the political nature and effects of online social networking sites and online groups. We find that online groups that are facilitated through SNS platforms such as Facebook perform many similar
functions to their offline counterparts. Online political groups are effective in increasing offline political participation, but appear to fall short of increasing levels of political knowledge. We find this is the case because while the groups offer many applications that members can use to feel engaged and politically empowered, the group wall discussion falls short of quality deliberation and offers little substantive information sharing.

There are clear limitations to this project however, mainly the sample frame and external validity of our findings. While our sample closely approximates the campus in terms of demographics, a better sample would be a nationally representative panel. Future research should investigate these measures, these findings, and other relevant questions with better sampling techniques in a panel study. We anticipate that as research in this field continues to grow in demand and interest that this will become easier to do. Furthermore, an interesting line of future endeavor should look at specific forms of political participation as they are facilitated through new media. As part of this, we should continue to expand our understanding of what it means to be a political participant in the era of new media as these definitions, and survey measures, should continue to change rapidly.
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Lenhart, A., Madden, M., Macgill, A., & Smith, A. (2007). Teens and social media: The use of social media gains a greater foothold in teen life as they embrace the


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Table 1:

<table>
<thead>
<tr>
<th>Variables</th>
<th>OLS</th>
<th>2SLS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b (se)</td>
<td>p &gt;</td>
</tr>
<tr>
<td>Political group membership on FB</td>
<td>1.785(.315)</td>
<td>.000</td>
</tr>
<tr>
<td>Predicted probability of group membership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
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</tr>
<tr>
<td>Online news user</td>
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<tr>
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<td>.073</td>
</tr>
<tr>
<td>R²</td>
<td>.411</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
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<td></td>
</tr>
<tr>
<td>F</td>
<td>13.12</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>199</td>
<td></td>
</tr>
</tbody>
</table>

Note: Data derived from survey of 455 college undergraduates. Unstandardized regression coefficients with standard error in parentheses. All tests are two-tailed tests. To control for possible interdependence between group membership and political participation offline, we estimated a two-stage least squares model.

*a Predicted probabilities from first-stage OLS regression where the dependent variable is political group membership, and independent variables are female, age, family income, party identification, year in school political interest, White, Asian, Black, Hispanic, Online news user, and privacy restrictions. Years on Facebook and frequency of Facebook log-in are the instrumental variables.
Table 2:

<table>
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<tr>
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<th>2SLS</th>
</tr>
</thead>
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<tr>
<td></td>
<td>b (se)</td>
<td>p &gt;</td>
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<tr>
<td>Political group membership on FB</td>
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<td>.036</td>
</tr>
<tr>
<td>Predicted probability of group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>membership</td>
<td>a</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.590(.225)</td>
<td>.009</td>
</tr>
<tr>
<td>Age</td>
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<td>.040</td>
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<tr>
<td>Family income</td>
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<td>.158</td>
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<tr>
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<td>.931</td>
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<tr>
<td>Year in school</td>
<td>.340(.178)</td>
<td>.058</td>
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<tr>
<td>Political interest</td>
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<td>.001</td>
</tr>
<tr>
<td>White</td>
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<tr>
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<tr>
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<tr>
<td>Adjusted R²</td>
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<tr>
<td>F</td>
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<td></td>
</tr>
<tr>
<td>N</td>
<td>191</td>
<td></td>
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</table>

Note: Data derived from survey of 455 college undergraduates. Unstandardized regression coefficients with standard error in parentheses. All tests are two-tailed tests. To control for possible interdependence between group membership and political knowledge, we estimated a two-stage least squares model.

Predicted probabilities from first-stage OLS regression where the dependent variable is political group membership, and independent variables are female, age, family income, party identification, year in school political interest, White, Asian, Black, Hispanic, Online news user, and privacy restrictions. Years on Facebook and frequency of Facebook log-in are the instrumental variables.
Table 3:

<table>
<thead>
<tr>
<th>Political Facebook Group Page Content</th>
<th>Percentage of Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Provide additional contact information</td>
<td>39%</td>
</tr>
<tr>
<td>Provide web links in the &quot;links&quot; section</td>
<td>18%</td>
</tr>
<tr>
<td>Provide video links</td>
<td>41%</td>
</tr>
<tr>
<td>Event information posted</td>
<td>80%</td>
</tr>
<tr>
<td>News posts provided</td>
<td>26%</td>
</tr>
<tr>
<td>Photos posted</td>
<td>13%</td>
</tr>
<tr>
<td>Discussion topics posted on &quot;discussion board&quot;</td>
<td>13%</td>
</tr>
</tbody>
</table>

Note: Data from content analysis of 39 randomly selected political Facebook groups.
Figure 1: Content Analysis of Political Group Wall Posts
Appendix A:

First-Stage Regression on Political Group Membership for Political Participation

<table>
<thead>
<tr>
<th>Variables</th>
<th>OLS</th>
</tr>
</thead>
</table>
| Female                           | .21 (.11) | .05  
| Age                              | -.04 (.07) | .55  
| Family income                    | -.07 (.03) | .05  
| Party identification             | .09 (.04) | .02  
| Year in school                   | -.12 (.09) | .21  
| Political interest               | .26 (.04) | .00  
| White                            | .16 (.12) | .18  
| Online news user                 | .01 (.01) | .13  
| Privacy restrictions             | -.06 (.07) | .34  
| **Length of FB membership**     | .15 (.06) | .01  
| **Frequency log-in**             | .08 (.05) | .09  

**R²**                  .304

**Adjusted R²**       .263

**F**                 7.43

**N**               199

Note: Instrumental variables in bold. Data derived from survey of 455 college undergraduates. Unstandardized regression coefficients with standard error in parentheses.
## Appendix B:

### First-Stage Regression on Political Group Membership for Political Knowledge

<table>
<thead>
<tr>
<th>Variables</th>
<th>OLS</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>b (se)</td>
</tr>
<tr>
<td>Female</td>
<td>.17 (.12)</td>
</tr>
<tr>
<td>Age</td>
<td>-.13 (.07)</td>
</tr>
<tr>
<td>Family income</td>
<td>-.04 (.04)</td>
</tr>
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<td>Party identification</td>
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<td>Political interest</td>
<td>.27 (.05)</td>
</tr>
<tr>
<td>White</td>
<td>.21 (.13)</td>
</tr>
<tr>
<td>Online news user</td>
<td>.01 (.01)</td>
</tr>
<tr>
<td>Privacy restrictions</td>
<td>-.14 (.07)</td>
</tr>
<tr>
<td><strong>Length of FB membership</strong></td>
<td><strong>.11 (.06)</strong></td>
</tr>
<tr>
<td><strong>Frequency log-in</strong></td>
<td><strong>.08 (.05)</strong></td>
</tr>
</tbody>
</table>

\[ R^2 = .279 \]
\[ \text{Adjusted } R^2 = .235 \]
\[ F = 6.29 \]
\[ N = 191 \]

**Note:** Instrumental variables in bold. Data derived from survey of 455 college undergraduates. Unstandardized regression coefficients with standard error in parentheses.
Appendix B:
Limited Information Maximum Likelihood Regression

<table>
<thead>
<tr>
<th>Variables</th>
<th>Political Participation</th>
<th></th>
<th>Political Knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b  (se)</td>
<td>p &gt;</td>
<td>z</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-.28 (.52)</td>
<td>.60</td>
<td>-.71 (.27)</td>
<td>.01</td>
</tr>
<tr>
<td>Age</td>
<td>.30 (.31)</td>
<td>.34</td>
<td>.41 (.19)</td>
<td>.03</td>
</tr>
<tr>
<td>Family income</td>
<td>-.24 (.16)</td>
<td>.14</td>
<td>.12 (.08)</td>
<td>.13</td>
</tr>
<tr>
<td>Party identification</td>
<td>.35 (.22)</td>
<td>.12</td>
<td>-.07 (.12)</td>
<td>.55</td>
</tr>
<tr>
<td>Year in school</td>
<td>-.06 (.40)</td>
<td>.89</td>
<td>-.38 (.19)</td>
<td>.05</td>
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<tr>
<td>Political interest</td>
<td>.65 (.40)</td>
<td>.11</td>
<td>.09 (.25)</td>
<td>.70</td>
</tr>
<tr>
<td>White</td>
<td>.49 (.56)</td>
<td>.38</td>
<td>.33 (.30)</td>
<td>.28</td>
</tr>
<tr>
<td>Online news user</td>
<td>.03 (.03)</td>
<td>.27</td>
<td>-.00 (.01)</td>
<td>.99</td>
</tr>
<tr>
<td>Privacy restrictions</td>
<td>-.48 (.31)</td>
<td>.12</td>
<td>.13 (.18)</td>
<td>.49</td>
</tr>
<tr>
<td><strong>Instrumented group</strong></td>
<td><strong>2.80 (1.33)</strong></td>
<td><strong>0.04</strong></td>
<td><strong>1.16 (.83)</strong></td>
<td><strong>0.17</strong></td>
</tr>
<tr>
<td>membership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²                        | .378                    | 0.085                    |
Adjusted R²                | .345                    | 0.034                    |
F                          | 4.00                    | 4                        |
N                          | 199                     | 191                      |

Note: Data derived from survey of 455 college undergraduates.
Unstandardized regression coefficients with standard error in parentheses.
* Conditional Likelihood Ratio p = .0661
** Conditional Likelihood Ratio p = .1773