

2014

Polarized and liking it: How political polarization affects active avoidance behavior on Facebook

Bobbi L. Newman
Iowa State University

Follow this and additional works at: <http://lib.dr.iastate.edu/etd>

 Part of the [Mass Communication Commons](#), and the [Political Science Commons](#)

Recommended Citation

Newman, Bobbi L., "Polarized and liking it: How political polarization affects active avoidance behavior on Facebook" (2014).
Graduate Theses and Dissertations. 13686.
<http://lib.dr.iastate.edu/etd/13686>

This Thesis is brought to you for free and open access by the Graduate College at Iowa State University Digital Repository. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

**Polarized and liking it:
How political polarization affects active avoidance behavior on Facebook**

by

Bobbi L. Newman

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

Major: Political Science

Program of Study Committee:
Valerie Hennings, Co-Major Professor
Mack Shelley, Co-Major Professor
Daniela V. Dimitrova

Iowa State University

Ames, Iowa

2014

Copyright ©Bobbi L. Newman, 2014. All rights reserved.

TABLE OF CONTENTS

LIST OF FIGURES	iv
LIST OF TABLES	v
ACKNOWLEDGEMENTS	vi
ABSTRACT	vii
CHAPTER 1	1
CHAPTER 2	5
Polarization of the Electorate	5
Online Polarization	7
Demographics and Use of the Internet and SNSs	11
Social Network Sites and Political Content	12
Facebook and Political Content	13
How Anonymity Affects Behavior	15
CHAPTER 3	17
Theory and Hypotheses	17
Data Collection	19
De-Identification of Data	19
Measurement	20
Data Analysis	20
Sample	23
Potential Weaknesses of the Data	24
Internet Access and Use	24
Profession of Respondents	25
Facebook News Feed	26
CHAPTER 4:	28
Distribution	28
Sample	29
Demographics	30
Politics	32
Active Avoidance Behaviors	35
Hypotheses 1 and 2	37
Hypothesis 3	38
Hypothesis 4	38
Additional Results	41
CHAPTER 5	48
Discussion	48
Limitations	49
Contribution	50

Potential Future Research	51
REFERENCES	54
APPENDIX	59

LIST OF FIGURES

Figure 1	“Two sets of groups using the #my2k hashtag over a two-day period in Jan 2013” (Smith et al., 2014)	9
Figure 2	Initial tweet	28
Figure 3	Ideology	32
Figure 4	Intensity of ideology	33
Figure 5	Strength of political views	34
Figure 6	Level of perceived political knowledge	35

LIST OF TABLES

Table 1 Gender of respondents	30
Table 2 Highest education level achieved	30
Table 3 Annual household income	31
Table 4 Party affiliation	32
Table 5 Active avoidance behaviors	36
Table 6 Total number of active avoidance behaviors reported.....	37
Table 7 Regression model results: Active avoidance behaviors.....	40
Table 8 Sum of types of political encounters and activities on Facebook.....	42
Table 9 Frequency of political and public affairs discussions Facebook	42
Table 10 Regression models results: Polarization variables by frequency of political and public affairs discussions Facebook.....	43
Table 11 How often do you discuss politics and public affairs with others in person, by phone call, or by letter?.....	44
Table 12 Sum of types of offline political activities and engagement.....	45
Table 13 Regression model results: polarization with offline political encounters.....	46
Table 14 Regression model results: Frequency of political discussions and engagement with political content on Facebook	47

ACKNOWLEDGEMENTS

I would like to thank my major professor, Dr. Valerie Hennings, for her continuous support, encouragement, and assistance. As I forged a path different from most students in the program her willingness to share her wisdom and experience during my moments of doubt reassured me that I am on the right path. I am deeply grateful that being assigned as her teaching assistant two years ago placed me in contact with her.

Dr. Mack Shelley taught me statistical methods and provided excellent suggestions for my research. I appreciate his patient as I worked through my analysis and his willingness to share his knowledge with me.

I also deeply appreciate the feedback and support from my committee member Dr. Daniela V. Dimitrova who helped me bridge the gap between mass communication and political science research methods.

Finally, I am grateful to Dr. David Anderson, my research methods instructor, who continued to provide support, encouragement, and advice long after our class together was over. His enthusiasm for research and his willingness to share his knowledge made conducting this research fun and exciting.

ABSTRACT

This research sought to determine how and if political polarization is affecting behavior on Facebook. An online survey was constructed to measure levels of polarization, offline political activity, online political activity, and active avoidance behaviors on Facebook. The survey was conducted over 4 weeks. I found that those who encounter a higher amount of political content and discussions on Facebook also reported a higher number of active avoidance behaviors over all. This group was also more likely to report unFriending someone because of something that Friend posted related to political or social issues.

Those with a higher number of reported encounters with political content on Facebook reported a higher level of self-moderation as well, being more likely to delete one of their own posts when that post resulted in disagreeable or offensive comments from others. Those who reported greater frequency of political discussions on Facebook are more likely to delete comments from Friends that they find disagreeable or offensive on their own posts.

The higher the intensity of ideology the more likely respondents were to discuss politics on Facebook and encounter or engage with political content on Facebook. Those with stronger political views were more likely to engage in political discussions and more likely to encounter political content on Facebook. Those with a higher level of perceived political knowledge were more likely to discuss politics and more likely to encounter political content on Facebook.

Those with a higher intensity of ideology, stronger political views, and higher levels of perceived political knowledge discuss politics more frequently and engage in more political activities offline.

CHAPTER 1

INTRODUCTION

One of the most important aspects of a democracy is deliberation amongst citizens because it brings the electorate together in a shared process and creates a pool of knowledge, even if no consensus is reached. Deliberation increases the efficacy and political knowledge of citizens (Gastil & Dillard, 1999; Jacobs et al., 2009), resulting in a greater understanding of, and participation in, the political process. Exposure to a variety of political viewpoints and differing opinions creates a common ground for the electorate, which is an important foundation for the political discussion and debate that are essential for a democracy (Sunstein, 2007). Isolation from differing political perspectives can deepen the ideological divide in the electorate, resulting in a polarized population (Abramowitz, 2010b). This polarization leads to factions less willing to be governed by opposing factions or parties and less likely to compromise to reach a solution to societal problems (Mutz, 2011). Polarization results in a decrease in the shared experiences that foster solutions to societal problems in a heterogeneous society (Sunstein, 2007).

In the last two decades, reports of the polarization of the American public have increased greatly, often blamed on technological advances. These technologies, particularly the Internet, and more recently social network sites (SNSs),¹ allow people to seek out those with similar viewpoints and avoid those with conflicting opinions more easily than they might in offline encounters. The body of literature offers conflicting

¹ For the purposes of this thesis I will be using the definition of a social networks site provided by boyd and Ellison “as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system” (2007).

reports on the validity and extremity of these claims. Like the printing press, radio, telephone, and other new communication technologies that came before it the Internet can be seen as a powerful tool that can be used to either foster or break down democracy.

Almost as soon as the Internet came into public use came the fear that the Internet would lure users to the dark side – enticing them to read personalized news sources that only displayed stories and information that fit their personal interests and avoid information that conflicted with their interests or beliefs (Negroponte, 1995). The Internet lowers many of the barriers to connecting with like-minded individuals (Farrell, 2012; Valentino et al., 2009). The Internet allows the polarized electorate to actively avoid encounters and interactions with political perspectives that conflict with their own viewpoints (Buchstein, 1997; Hacker et al., 2006; Sunstein, 2007; Valentino et al., 2009; Witschge, 2004) and instead retreat into an echo chamber of homogeneous views, where they only encounter news and information that supports existing beliefs. As there is no definitive definition of echo chamber, in this thesis echo chamber refers to a group or network of people who share a similar political perspective and who share stories, news, and opinions that reinforce that perspective, while avoiding stories, news, and opinions that conflict with that perspective.

Scholars, such as Sunstein, are concerned about the ability of Internet users to craft a Daily Me (2007), a personal online perspective in which the user only encounters news and information that match the user's interests (Negroponte, 1995). This ability allows the polarized electorate to actively avoid exposure to different political perspectives (Sunstein, 2007). Research into the effects of the Internet on the political behavior of the American electorate has shifted focused over time to new and developing

communication resources. Initial research focused on email² lists, later blogs³, and finally SNSs such as MySpace, YouTube, Twitter, and Facebook. Research on the latter is somewhat limited, but growing. Political behavior on Facebook can be difficult to study due to the closed nature of the site. While Facebook encourages users to Friend⁴ as many friends, lovers, coworkers, classmates, associates, and acquaintances as possible, it does allow users to limit the visibility of their activity in a number of ways so that it is outside of the public sphere as such. Because Facebook does encourage numerous and loose connections users are more likely to be exposed to the political viewpoints of their online connections than they might be in similar offline encounters (Horrigan et al., 2004). This creates the potential for greater discussion and exposure to a wider range of political perspectives.

The same abilities of the Internet and SNSs that might expose users to a wider range of political perspectives also make it possible for users to seek out likeminded groups and actively limit exposure to conflicting political viewpoints. Those who are concerned about the possibility that SNSs, and Internet users in general, will use online services to limit their exposure to differing political perspectives and instead insulate themselves among likeminded people claim that this behavior hurts democracy for a number of reasons. First, lack of exposure to a variety of political views and discussion removes the common ground needed for appropriate political discussion and debate (Sunstein, 2007). This line of thought holds that deliberation and discussion are essential

² “A system for sending textual messages (with or without attached files) to one or more recipients via a computer network (esp. the Internet); a message or messages sent using this system.” (Email, n.d.)

³ “A frequently updated web site consisting of personal observations, excerpts from other sources, etc., typically run by a single person, and usually with hyperlinks to other sites; an online journal or diary” (Weblog, n.d.)

⁴ All of a user’s connections on Facebook are called Friends by Facebook. To differentiate this from the normal definition of a friend I will be capitalizing Friend when referring to Facebook connections throughout this thesis.

for a democracy. Second, the ability of SNS users to surround themselves with likeminded people will further polarization (Sunstein, 2007), making governing difficult as these partisan factions will be less likely to compromise and less likely to be governed by opposing factions (Barber & McCarty, 2013; Mutz, 2011).

This study seeks to determine what, if any, measures Facebook users are taking to actively avoid differing political perspectives. Chapter 2 examines the existing literature on online polarization; who uses the Internet and SNSs and how these facilitate polarization, echo chambers, and active avoidance behavior; perceived political knowledge; and how Facebook is different from other SNSs. Chapter 3 details the methodology of the study. Chapter 4 examines the results of the study, and finally, chapter 5 discusses the findings, potential future research, and concludes this thesis.

CHAPTER 2

LITERATURE REVIEW

This research seeks to determine if, and how, the polarization of the American electorate is affecting the behavior of Facebook users in such a way that allows individuals actively avoid differing political perspectives. This literature review surveys why polarization matters and what behavior we should be expect to observe because of it. It covers what we know about Internet use and access to establish who is using the Internet and SNSs and how these are being employed. This literature review explores how the Internet and SNSs facilitate polarization, echo chambers, and active avoidance behaviors. It also covers how the Facebook requirement that individuals use real names when creating an account creates an environment on Facebook that is different from other SNSs.

Polarization of the Electorate

The American electorate is deeply divided ideologically on social and political issues, in other words polarized (Abramowitz, 2010b). There is some evidence that while the general public is not becoming more polarized those who self-identify with a specific party are becoming increasingly polarized (Abramowitz & Saunders, 2008; Evans, 2003; Stroud 2011). According to Abramowitz and Saunders those who are politically engaged have always been more polarized than others (2008). Those who more strongly identify with a political party, liberal Democrats and conservative Republicans, display greater polarization than do those who are moderate (Abramowitz & Saunders, 2008; Evans,

2003; Stroud, 2011). Specific topics such as abortion, sexuality, divorce, and school prayer show greater evidence of party polarization (Abramowitz, 2010; DiMaggio et al., 1996; Evans, 2003; Harris et al., 2013). In these instances the party-line polarization might be seen as a reflection of the moral and religious stances the Democratic and Republican parties have taken on these issues over recent years (Evans 2003; Harris et al, 2013). Issues such as immigration, the right of homosexual couples to be legally married, and women's reproductive rights have entwined moral or ethical beliefs to political ideology, thereby furthering the degree of polarization. Research indicates that those who more strongly identify with a political party exhibit higher levels of polarized behavior offline (Abramowitz & Saunders, 2008; Evans, 2003; Stroud, 2011) yet this has not been tested online without the veil of anonymity that many SNSs and Internet services offer.

Polarization is not just the sorting of the electorate into parties but rather is a deep ideological divide (Abramowitz & Saunders, 2008). This divide has increased overtime, each party has shown a substantial increase in the negative view of the opposing party since 1996 (Shaw, 2012). Polarized individuals are convinced not only that their perspectives are correct but that the perspectives of the opposition aren't just wrong but inferior, illogical, and evil (Abramowitz, 2013; Brasted, 2012; Hacker et al., 2006; Iyengar, Sood, & Lelkes, 2012; Mutz, 2006; Shaw, 2012). This vilification of those with a differing political perspective decreases the likelihood of deliberation and enforces echo chambers. This belief in the correctness of one's political and policy views coupled with the belief in the inferiority and wrongness of opponents' views produces a high level of subjective (or perceived) political knowledge. O'Cass reported that voters who report high levels of subjective, or perceived, political knowledge have higher levels of

confidence in their political views (2002). Therefore we would expect polarized individuals, who are confident in the correctness of their views, to report a higher perceived level of political knowledge (O’Cass, 2002; O’Cass & Pecotich, 2005). This thesis will examine self-reported perceived levels of political knowledge rather than objective knowledge as a measure of polarization.

Online Polarization

Efforts to determine the extent that the online political behavior of the American public demonstrates polarization have shown mixed results. In their study of political bloggers Adamic and Glance found that the liberal and conservative communities rarely interact with each other (2005). Liberal bloggers tended to link to liberal blogs and conservative bloggers link to conservative blogs (Adamic & Glance, 2005). SNS users who have stronger party ties and lean towards the more extreme end of their party affiliation are more likely to use SNSs for political purposes (Rainie, 2012). Blog readers seek out blogs to read that align with their current political beliefs (Lawrence et al., 2010). When Twitter users who post tweets⁵ about a political issue with the same hashtag⁶ are mapped, they end up in two large, dense groups separated by ideology with little-to-no connection or interaction between the two groups (Smith et al., 2014). Figure 1 depicts the Twitter map created by Pew of the #my2k hashtag created by the Obama Administration on November 28, 2012 in reference to the ongoing Congressional budget conflict (Smith et al, 2014). Two clearly distinct groups emerge with little interaction between them. It is also possible that those who interact across ideological lines or seek

⁵ Posting a status update on Twitter, possibly containing images, video, or hyperlinks

⁶“The # symbol, called a hashtag, is used to mark keywords or topics in a Tweet. It was created organically by Twitter users as a way to categorize messages.” (Using hashtags on Twitter, n.d.).

out differing political viewpoints do so not to learn, share, or engage in deliberation, but rather to insult and mock those they perceive as opponents. Research by boyd and Yardi indicates that even when there is interaction across ideological lines the intention is to provoke the opposite side rather than engage in deliberative debate (2010).

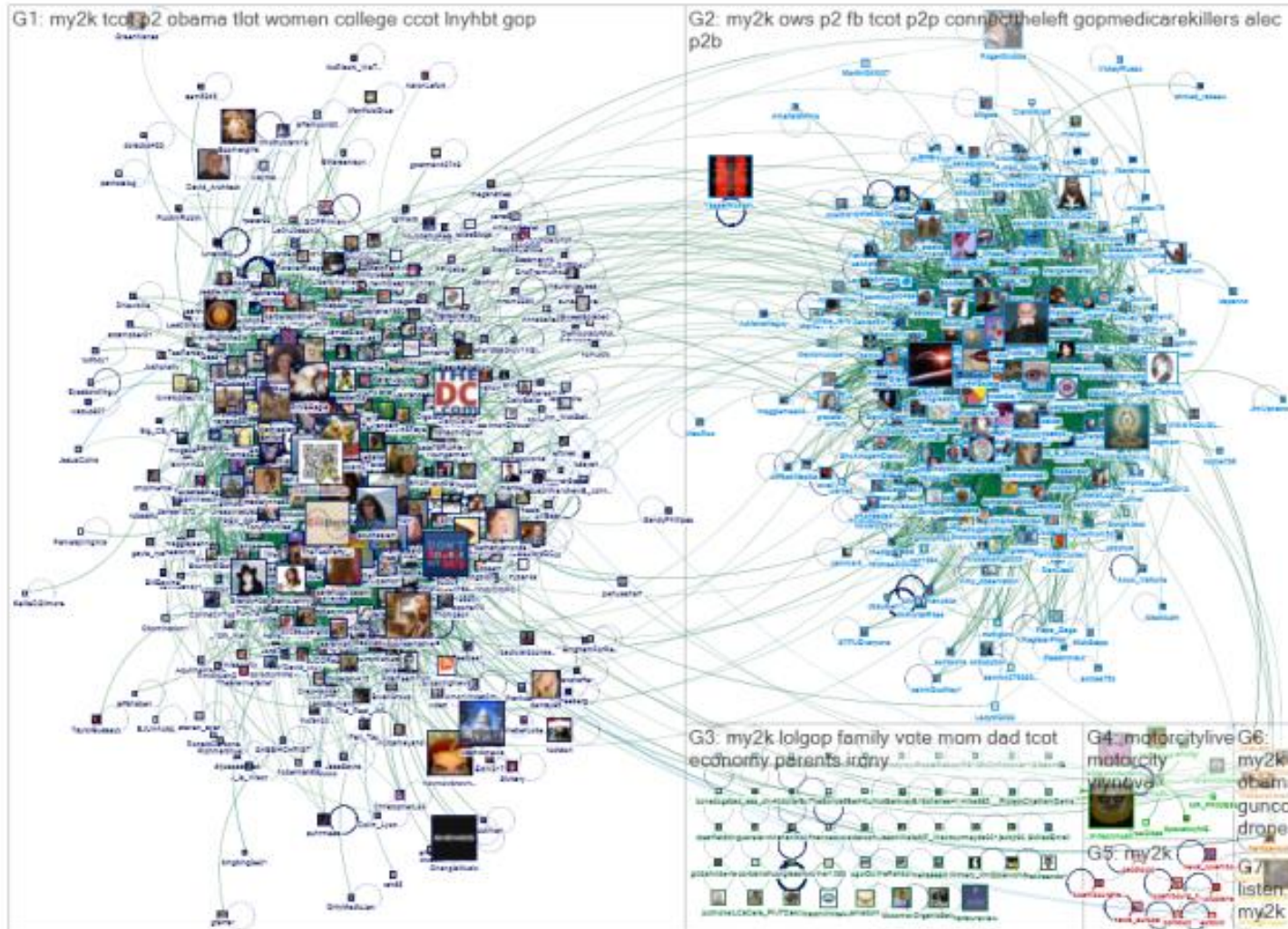


Figure 1 “Two sets of groups using the #my2k hashtag over a two-day period in Jan 2013” (Smith et al., 2014)

Some political scientists, such as Fiorina, argue that claims of an increasingly polarized American public are the production of media outlets and pundits who have vested interest in dynamic headlines (2005). The close elections of the last 15 years could be explained by a polarized America but polarization is not the only explanation. A close election could as easily be the result of a closely split, but not deeply divided public opinion (Fiorina, 2005). There are other possible explanations for the close races, after all as Mutz and Young (2011) point out, “complex findings do not cater to punchy headlines”(p. 1021).

While the potential exists for Internet users to limit their interactions to others who share similar political perspectives, the potential also exists for Internet users to encounter or to seek out those with differing viewpoints. Horrigan et al. found that Internet users had greater awareness of opposing viewpoints and a wider variety of political arguments than the general electorate (2004). In the 2004 survey 18% of respondents claimed that they prefer media sources that challenge their political views (Horrigan et al.). Instead of increasing polarization the Internet may actively be decreasing polarization by allowing users to gain greater exposure to a variety of political views (Kim, 2011). As with Internet access and use in general, those Internet users with higher education and income levels are more likely to be exposed to a wider range of political perspectives and arguments (Horrigan et al., 2004; Zickuhr, 2013). While exposure to a variety of political beliefs is important it is also important to examine the reaction when individuals encounter differing political perspectives, little has been done in this area.

It may be that the very nature of SNSs exposes users to more diverse political views. The wide range of people in one's Friends, and the Friends of Friends, offers a greater number of connections and possibilities for varying political perspectives. Users of SNSs are indirectly exposed to diverse political perspectives regardless of their partisan affiliation or political preferences (Kim, 2011). This exposure to diverse political perspectives happens regardless of whether individual users themselves share political content on SNSs (Kim, 2011; Rainie & Smith, 2012a; 2012b). It is this very nature of accidental exposure to political perspectives that requires further investigation. How do voters react when they encounter political perspectives that conflict with their own? Do all individuals react the same way?

Demographics and Use of the Internet and SNSs

Much of the theory and data on offline polarization has been applied to the online population; however, the online population is not necessarily reflective of the offline population. As of 2012 about 80% of the American electorate has access to and uses the Internet (Rainie & Smith, 2012a). It should be noted that Internet access and use falls along socio-economic lines. Internet access and use is more prevalent among whites, than among members of minority groups (Zickuhr, 2013). Higher education equates with higher Internet access and use, as does higher household income (Zickuhr, 2013). People 65 and over as well as those in rural areas are much less likely to have access to, and use, the Internet (Zickuhr, 2013). In addition, not everyone who uses the Internet uses social network sites. From 2008 to 2012 the percentage of Internet users who use SNSs more than doubled, growing from 33% to 69% (Smith, 2013).

While Blacks are slightly less likely than Whites to use the Internet overall, they are more likely to say that SNSs are important to them for political purposes (Rainie & Smith, 2012b). SNS users ages 18-29 are also more likely to say that SNSs are important to them for political purposes (Rainie & Smith, 2012b). Only about 16% of SNS users say that they regularly post about political issues (Rainie & Smith, 2012b). At the time of the survey 10% of SNS users had recently posted about politics and 6% said that all or most of their activity was related to politics (Rainie & Smith, 2012b). The incidence of SNS users who Like⁷ or promote content related to politics is significantly higher (38%) (Rainie & Smith, 2012b), indicating that while people do not take initiative to seek out and share new content they are comfortable with liking and sharing content others have shared first. It is worth noting that the survey was conducted in the months leading up to the 2012 presidential election, which could lead to higher than average numbers of SNS users sharing and seeing political content.

Social Network Sites and Political Content

SNSs are unique in that they push news and information to users. Traditional online services such as newsgroups, blogs, news websites, and chat rooms rely on pull functionality. Users pull news and information to themselves by actively navigating to a website or subscribing to a newsletter or service to seek out differing political perspectives. In the case of SNSs, after logging in a user has news and information from

⁷ Facebook users may click “like” under posts or comments made by others to indicate that they enjoy or agree with the content (Like, n.d.). These Likes then show up in the news feed of that user’s Friends. When referring to this action in this thesis I will capitalized Like to differentiate it from the normal use of the word like.

connections pushed to him or her requiring little to no effort on the part of the user to encounter a variety of political viewpoints from her or his contacts on that SNS.

On one hand, SNS use may facilitate political discussion by providing a forum for discussion that does not jeopardize personal relationships (Kelly et al., 2005). On the other hand, the broad scope of the people included in one's set of Facebook Friends may mean exposure to political viewpoints that might never be encountered through face-to-face interactions. There is some evidence that even when users do seek out differing perspectives the limitations of online interactions – that is, lack of personal interaction – may restrict the positive outcomes of such encounters (Witschge, 2004). In theory the Internet allows users to engage in discussions free of the identifying characteristics that might otherwise prejudice others against them, allowing for more open-minded communication and exposure to ideas; however the majority of discussion is done by a minority of Internet users (Rainie et al., 2012; Witschge, 2004).

Facebook and Political Content

About half of adult Facebook users, or 30% of the U.S. electorate, are exposed to news stories on the SNS (Mitchell et al., 2013). News exposure on Facebook is important because the Facebook news feed⁸ exposes adults to news stories they might otherwise not encounter (Mitchell et al., 2013). Of those exposed to news stories while on Facebook, 78% report other motives for visiting the site (Mitchell et al., 2013). This accidental exposure happens on Facebook in ways it would not while visiting other types of online services such as blogs, news sites, and newsgroups. Over half (55%) of the news stories

⁸ The Facebook news feed is displayed as the central column of a user's homepage and contains status updates, photos, videos, links, activity from applications, and Facebook activity from the user's Friends, Pages, and Groups (How news feed works, n.d.)

adults encounter on Facebook are related to national government and politics (Mitchell et al., 2013), indicating that Facebook users are encountering political news on Facebook that they are not encountering anywhere else. In addition to inadvertent exposure to political content, 38% of SNS users report actively engaging in political activity such as “liking” or sharing political content, posting thoughts on political and social issues, or encouraging others to take action on political or social issues (Rainie et al., 2013).

With the wide variety of Facebook Friends, Facebook users are often unaware of the political beliefs of their Friends until they see a politically related post from Friends, thereby increasing the likelihood that they will be exposed to political perspectives that they were not expecting. Over half (58%) of adult Facebook users exposed to news on Facebook report being surprised by a Friend’s opinion about a news story (Mitchell et al., 2013), which indicates that Facebook users were not made aware of these beliefs through other channels of communication. This also means that Facebook users are likely to be exposed to political perspectives that conflict with their own beliefs. Because of the nature of Facebook Friendships (coworkers, Friends of Friend, neighbors, classmates, etc.) it is probable that once users are aware of conflicting political perspectives of Friends they will choose to avoid the conflicting information, rather than unFriending and needing to deal with the fallout (Sibona, 2013). Facebook users are more likely to hide the updates that conflict with their political perspective, even if it means never commenting or seeing updates from that Friend, rather than deal with explaining to someone why they have been unFriended (Sibona, 2013). Facebook provides a unique opportunity to measure active avoidance behavior by requiring specific actions on the part of the user avoid to conflicting political perspectives that all individuals can employ

to retreat into their echo chambers. At this point no prior published research has attempted to measure this phenomenon.

How Anonymity Affects Behavior

There are hundreds of SNSs with different requirements and guidelines for users. Facebook has been selected for the purposes of this study because unlike many SNSs such as Twitter, Tumblr, YouTube, Flickr, or Myspace, Facebook requires that individuals use their real names when creating a Facebook profile. The majority of the research has focused on Internet tools, such as Adamic and Glance's 2005 and Lawrence et al.'s 2010 investigation of political blogs, as well as Harris et al.'s 2013 report on interaction in the comments of online news reports, that allow users to remain anonymous if they so choose. Pew's recent research into politics and SNSs includes anonymous sites such as Twitter and Tumblr (Rainie & Smith, 2012a; 2012b; Smith, 2013; Smith et al., 2014). There are both pros and cons of online anonymity. Without seeking to pass judgment or argue for or against anonymity, this thesis separates Facebook from other SNSs specifically because we do know that anonymity alters behavior and we cannot claim that anonymous and un-anonymous SNSs are equal.

Research shows that people's behavior changes when the Internet offers a cloak of invisibility through pseudonyms (Danzig, 2012) and provides a lack of accountability (Hatcher, 2009). If people feel they are anonymous, especially in a group, they are more likely to engage in what is perceived as socially unacceptable behavior (Nogami, 2009). The mask of anonymity offered by the Internet increases occurrences of defamation, libel, racism, hate speech, flaming, and trolling (Coffey, 2004; Lapidot-Lefher, 2012).

People will express bigotry, hatred, and prejudices, in ways that they would not without the anonymity offered by the Internet (Coffey, 2004). Additionally, when people see others act out in ways that would normally be considered socially unacceptable and suffer no real recourse, they often join in that behavior (Moore et al., 2012). Because the use of real names on Facebook increases civility in discussions (Halpern & Gibbs, 2012) it is expected that rather than engage with content with differing political perspectives, people will exhibit active avoidance behaviors that allow them to retreat into their echo chambers.

CHAPTER 3

METHODOLOGY

The purpose of this research is to investigate the political activity of the American electorate on Facebook. This research seeks to determine if, and how, political polarization affects active avoidance behavior on Facebook. If the electorate is actively avoiding differing political perspectives it is reasonable to expect to see specific avoidance behaviors in their Facebook use. Active avoidance behaviors involve respondents going out of their way to avoid exposure to items they would normally see in their Facebook news feed. Examples of active avoidance include hiding status updates from Facebook Friends, hiding the news feeds of Friends, unLiking⁹ Pages, unFriending Friends, deleting comments from Friends on their own posts that offer a differing political perspective, or even deleting the initial post that prompted the differing perspective comments.

Theory and Hypotheses

Because of the functionality of Facebook users are exposed to political news and information that conflicts with their political perspective (Kim, 2011; Rainie & Smith, 2012a, 2012b). There are several ways Facebook users might be exposed to different political perspectives. Facebook users may see posts from Friends that include conflicting political perspectives. If the user herself posts content with a political message or policy views Friends may respond with comments on that post that offer a different perspective.

⁹ When a Facebook user clicks “unlike” on a Page it removes the connection from that Page and stops stories from that Page from appearing in the user’s Facebook news feed.

A Facebook user may like¹⁰ a celebrity Page¹¹ to see updates about upcoming projects and life events, but the celebrity may also share politically related updates. The polarization of the electorate and the tendency to retreat to echo chambers causes individuals to avoid political perspectives that conflict with their own. Facebook offers users several options to avoid seeing posts that offer conflicting political perspectives.

Facebook offers users a number of ways to actively avoid any, and all, of these exposures by hiding individual posts from Friends and Pages, hiding the news feed from a Friend, unFriending a Friend, unLiking a Page, deleting comments on her own posts, or deleting the original post. Each of these options requires an active decision from the Facebook user and that she click on a link and select the corresponding choice. This creates a series of active avoidance behaviors that can be measured. Due to political polarization and the preference for news and information that enforce existing beliefs I expect to see the following:

H1: Those who identify as extremely liberal will report a higher number of active avoidance behaviors.

H2: Those who identify as extremely conservative will report a higher number of active avoidance behaviors.

H3: Those who feel strongly about their political views, whether liberal or conservative, will report a higher number of active avoidance behaviors.

H4: Those who report a higher level of perceived political knowledge will report a higher number of active avoidance behaviors.

¹⁰ When a Facebook user clicks “like” on a Facebook Page it connects the user to that Page. Stories from that page will appear in the user’s news feed (Like, n.d.).

¹¹ Facebook allows business, organizations, brands, and personalities to create a Page that Facebook users can Like to receive updates from the Page in their news feed. For the purpose of the thesis I will be capitalizing Page when referring to a Facebook Page to differentiate it from a webpage in general

Data Collection

Data were collected for this project by creating and dispersing an online survey using a Qualtrics account provided to Iowa State University faculty, staff, and students. Qualtrics is an online survey tool that allowed me to easily create and distribute my questions. Qualtrics allowed me to download the final data for further analysis. Qualtrics is secure; it passes SAS no. 70 requirements and meets the regulations of both the Health Insurance Portability and Accountability Act of 1996 & the Family Educational Rights and Privacy Act (Academic Solutions, n.d.).

I chose to use an online survey for several reasons. First, it allowed a greater number of responses to be collected in a shorter period of time. Second, it allowed users to answer questions anonymously and at their convenience. Third, because I am interested in online behavior, specifically Facebook, using online tools to disseminate and conduct the survey was likely result in more responses.

De-Identification of Data

Data were collected using the Qualtrics online survey tool. This software did collect the IP addresses of respondents to prevent multiple responses from the same individual. However, as the IP data are of no use to this research, once the survey was complete and before analysis began all IP addresses were stripped from the data and each observation in the data set was assigned a random identification number.

Measurement

If people are actively isolating themselves from conflicting political perspectives I expect to see active avoidance behavior in the results. Active avoidance behaviors include unLiking Facebook Pages that post updates with conflicting political viewpoints. For example, a Facebook user may Like a celebrity or organization Page to see updates about upcoming projects or events. However, the Page may occasionally share politically related posts that do not align with the user's personal views resulting in unliking the Page. Hiding the status updates, links, etc., hiding all of the updates from Friend with conflicting political perspectives, and unFriending Friends who share political perspectives that differ are all examples of avoidance behavior. I expect people to ignore or even delete comments on their own political postings that contradict their view points.

Data Analysis

To answer my research question of if and how political polarization affects active avoidance behavior on Facebook two pieces of data were needed. First, I needed a method to measure the level of polarization of respondents, and second, a method to measure active avoidance behavior was required. The data were not currently available, so I designed a survey instrument to measure these two factors as well as additional variables that may influence the outcome.

Survey questions (Appendix) were structured in six parts. The initial section determined if the respondent was a U.S. citizen, over age 18, and had a Facebook account. Respondents who failed to meet any one of these criteria were thanked for their

time and exited the survey. Respondents who met all the criteria proceeded into the survey questions.

The second section of questions measured the level of polarization of respondents using questions about party affiliation, conservative or liberal bias, strength of political views, and perceived knowledge on political and social issues. These questions served as independent variables. The three survey questions were:

1. How liberal or conservative do you consider yourself? 1(extremely liberal) to 7 (extremely conservative).
2. On a scale of 1 to 7 (7 being the highest) how strongly do you feel about your political views?
3. On a scale of 1 to 7 (7 being the highest) how knowledgeable are you about political and social issues?

The seven point scale for subjective or perceived political knowledge and for strength of political views is based on the work of Burton and Netemeyer (1992), Flynn and Goldsmith (1999), and O’Cass (2002). An additional independent variable was created by coding ideology based on the distance from moderate or middle of the road: 4 became zero, 3 and 5 became one, 2 and 6 became two, 1 and 7 became three.

The third section of questions provided independent variables of offline political activity to determine a level of political engagement. If respondents are not active and engaged offline they would not necessarily be expected be engaged online and therefore not exhibit active avoidance behaviors.

The fourth set of questions focused on Facebook political activity. These independent variables determined if respondents are politically active on Facebook, and if

and how respondents are interacting with differing political perspectives on Facebook. Questions determined if respondents Like Facebook Pages whose posts sometimes offer opposing political viewpoints, if respondents are Facebook Friends with people with opposing political view points, if those Friends and Pages share political content and how respondents interact with that content. If respondents are not engaging with political content online I should not necessarily expect them to come into contact with opposing political behaviors that result in active avoidance behavior.

The fifth series of questions was designed to determine if respondents are exhibiting active avoidance behaviors and provided the seven dependent variables used in analysis. Active avoidance behaviors were measured by six yes or no questions designed to determine if active avoidance behavior is happening. An additional variable was created by adding the total number of active avoidance behaviors for a range of 0-6 for a total of 7 dependent variables. Active avoidance questions were:

In the last 12 months have you:

1. Hidden a post that you did not agree with from a friend about a political or social issue?
2. Hidden all posts from a friend because you do not agree with the stories or opinions s/he posts about political or social issues?
3. Unfriended a friend because you do not agree with the stories or opinions s/he posts about political or social issues?
4. Unliked (unfollowed) a Page because of post about political or social issues that you do not agree with?

5. Deleted comments that you found offensive or disagreeable on something you posted?
6. Deleted something you posted when it resulted in disagreeable or offensive comments from others?

The final section of questions collected included demographic information such as gender, education level, year of birth, and annual household income. This section provided the final set of independent variables.

The selection of questions was designed to answer the research question if and how polarization is affecting active avoidance behavior on Facebook. The questions also provide information as to whether Facebook political engagement follows offline patterns and online patterns in general.

Sample

This study used a convenience sample of my SNS contacts. While a convenience sample may not be representative of the population as a whole, this is a common methodology when studying SNSs (Chen, 2011; Chen & Marcus, 2012; Farrel & Dresner, 2008; Glynn et al., 2012; Lee & Ma, 2012; Macafee, 2013; Smock et al., 2011; Zhao et al., 2008). The survey was dispersed using my SNS accounts and email contacts. Twitter dispersion included tweeting a brief request¹² to take the survey to my approximately 9,000 Twitter followers over the course of a 4 week period (December 15, 2013 through January 17, 2014). A similar format was used on Facebook, where I shared

¹² Twitter limits posts to 140 characters (Learn the basics, n.d.)

a link with a request to take the survey with approximately 500 Facebook Friends. Additionally I directly emailed approximately 25 contacts a request to take the survey. This offered exposure to the request through three different venues and allowed for the resharing¹³ of the request either through a retweet¹⁴, a Facebook share, or an email forward. Though a convenience sample, this methodology provided me the opportunity to examine polarization on Facebook

Potential Weaknesses of the Data

Internet Access and Use

This survey was distributed online. A portion of the U.S. electorate either lacks access to, or declines to use, the Internet. While an online survey may be reflective of Internet users it is not reflective of the U.S. population as a whole. In a 2012 report the Pew Research Center found that about 80% of the American adult public population has access to, and uses, the Internet (Raine & Smith, 2012a). It is also important to note that availability of Internet access and use falls along dimensions of race and class. Whites report higher access and use of the Internet, compared to members of ethnic/racial minorities (Zickuhr, 2013). Both higher education level and higher household income level indicate higher probability of Internet access and use (Zickuhr, 2013). Senior citizens (age 65 and over) as well as those living in rural areas are significantly less likely to have access to, and use, the Internet (Zickuhr, 2013).

It should be noted that of those who use the Internet not all use SNSs, although the ranks of SNS users are growing. The proportion of Internet users who use SNSs more

¹³ Others to repost my initial request

¹⁴ The reposting of an initial tweet by other users on Twitter

than doubled from 2008 to 2012, increasing from 33% to 69% of Internet users (Smith, 2013). Women are more likely than men to use SNSs (Rainie, 2012). However, since this research is intended to study online behavior, specifically on Facebook this is acceptable as long as it is not applied to the population as a whole.

Profession of Respondents

The majority of my Twitter followers and Facebook contacts work in the library profession. Because this is a convenience sample it may not accurately reflect the U.S. electorate as a whole. A 2013 report from the American Library Association (ALA) survey of its membership reports that 95% of the respondents hold a master's degree or higher. According to a 2012 Pew Research Center report, 35% of college graduates self-report as Democrats, while 27% lean Republican (Closer, 2012). Some reports indicate that those who have attended some graduate school have the lowest levels of exposure to political perspectives that differ from their own (Mutz, 2006). Women dominate the profession, only 19.3% of the ALA survey respondents were male (2013). According to Pew 40% of all women are Democratic while 27% are Republican (Closer, 2012). The ALA membership survey revealed that the vast majority of respondents (87.1%) identify as White (Closer, 2012) and according to 2012 Pew Research Center data Whites lean Republican nationally (34%) with only 28% identifying as Democrat. While the survey for this research was not based on a representative sample, the resulting data still allow for an examination of polarization on Facebook that can easily be replicated using a more representative sample later.

Facebook News Feed

The final issue is the Facebook news feed itself. The homepage of Facebook for users is a news feed that displays the posts of Friends and Pages the user has Liked. The news feed is a running tally of the online activity of the user's Friends and Pages.

Facebook closely guards information regarding the algorithm that determines what items show up in a user's news feed. The Facebook news feed is not a simple real time display of all of the activity of all of a user's Facebook Friends and Pages. Instead Facebook uses a complex algorithm to determine what activity shows up in a user's news feed.

According to the Facebook website, "The News Feed algorithm uses several factors to determine top stories, including the number of comments, who posted the story, and what type of post it is (ex: photo, video, status update, etc.)" (How News, n.d.). According to Wagner (2013) only about 20% of the potential activity shows up in a Facebook user's news feed. The news feed algorithm does take into account how often and how much a user has interacted with the activity of individual Friends in the past (Wagner, 2013). As a user interacts more with a Friend or Page, Facebook will automatically show the activity of that Friend or Page more often in the news feed. This could mean that users are Facebook Friends with people who hold differing political perspectives but they are not seeing that activity for a number of reasons including that they have not interacted with that user in the past. Survey questions attempted to determine how much exposure respondents have to differing political perspectives and this information will be accounted for in the analysis.

This survey provides an initial exploration into active avoidance behavior on Facebook. This study could be duplicated later, with the intent to select a more

representative sample of the online population. This study moves past the theoretical aspects of polarization to determine if polarization and the electorate's preferences of echo chambers that support their existing political perspectives is resulting in active behavior to avoid different political perspectives.

CHAPTER 4:

RESULTS

Distribution

To gather data for this analysis I created an online survey using Qualtrics. I posted links to the survey to my Twitter and Facebook accounts, and sent out emails to contacts over a 4 week period from December 15, 2013 through January 17, 2014.

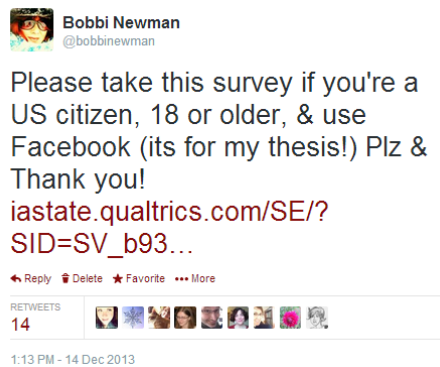


Figure 2 Initial tweet

My initial tweet (Figure 2) was posted on Saturday, December 14, 2013 and received fourteen retweets. I posted a second tweet on Sunday, December 15, 2013 which received six retweets and one favorite¹⁵. On Monday, December 16, 2013, I posted a third tweet which received four tweets and two favorites. My final tweet was posted on Saturday, December 21, 2013, and received four retweets and two favorites. At the time of the postings I had approximately 9,000 Twitter followers; however, no effort was

¹⁵ Twitter allows users to “favorite” the tweets of other users. A favorite is “represented by a small star icon next to a Tweet, are most commonly used when users like a Tweet. Favoriting a Tweet can let the original poster know that you liked their Tweet, or you can save the Tweet for later.” (Favoriting a tweet, n.d.)

made to determine how many of those accounts were active. There is also no way to determine how many people saw each Tweet or retweet. My initial post to Facebook was on December 14, 2013. and received shares by 15 people. At the time of posting I had approximately 450 Friends. There is no way to determine how many people saw my original post or the subsequent shares. I sent an email to 25 people with a link to the survey and text encouraging them to take the survey as well as share the survey with their family and friends.

Sample

The survey received 510 initial clicks, for a response rate of 18.58% based on the number of potential respondents. It is unlikely that all Twitter followers, Facebook friends, and email recipients saw the link to the survey, so it is challenging to calculate the precise response rate. There were 496 responses to Question 1, “Are you a U.S citizen?,” thirteen negative, and 483 affirmative. Question 2, “Are you 18 years of age or older?,” received 482 responses, all affirmative. The final qualification question, “Do you have a Facebook account?,” received 482 responses, two negative and 480 affirmative. Of the 480 people who moved past the qualifying questions, 445 answered all the questions through the six questions designed to measure active avoidance behavior and 444 respondents answered all the survey questions. Data analysis was undertaken using the 444 complete responses to the survey.

Demographics

Of the 444 responses 333 (75%) were female, 107 (24%) were male, and four (1%) responded “other” (Table 1). Respondents were heavily educated, with the majority (75%) holding a master’s degree or higher; 21 (5%) doctorate degree, 34 (8%) professional degree, 277 (62%) master’s degree, 72 (16%) bachelors degree, 19 (4%) high school diploma, and 1 never finished elementary school (Table 2).

Table 1 Gender of respondents

Male	107	24.00%
Female	333	75.00%
Other	4	1.00%

Table 2 Highest education level achieved

None (never finished elementary school)	1	0%
Elementary school diploma	0	0%
High school diploma or the equivalent (GED)	19	4%
Associate degree	20	5%
Bachelor's degree	72	16%
Master's degree	277	62%
Professional degree (MD, DDS, DVM, LLB, JD, DD)	34	8%
Doctorate degree	21	5%

The majority (80.18%) of respondents reported a household income of over \$50,000 a year; 88 (19.82%) under \$49,999, 44 (9.91%) \$50,000 to \$59,999, 20 (4.5%) \$60,000 to \$69,999, 36 (8.11%) \$70,000 to \$79,999, 40 (9.01%) \$80,000 to \$89,999, 38 (8.56%) \$90,000 to \$99,999, 84 (18.92%) \$100,000 to \$149,999, 45 (10.14%) \$150,000 and over, and 49 (11.04%) preferred not to answer (Table 3).

Table 3 Annual household income

Less than \$10,000	2	0.45%
\$10,000 to \$19,999	7	1.58%
\$20,000 to \$29,999	13	2.93%
\$30,000 to \$39,999	20	4.50%
\$40,000 to \$49,999	46	10.36%
\$50,000 to \$59,999	44	9.91%
\$60,000 to \$69,999	20	4.50%
\$70,000 to \$79,999	36	8.11%
\$80,000 to \$89,999	40	9.01%
\$90,000 to \$99,999	38	8.56%
\$100,000 to \$149,999	84	18.92%
\$150,000 and over	45	10.14%
Prefer not to answer	49	11.04%

Politics

The majority of respondents reported being members of the Democratic Party: 293 (66%) Democrat, 38 (8.6%) Republican, 70 (15.8%) Independent, 16 (3.6%) Libertarian, 16 (3.6%) Green, and 11 (2.5%) Other (Table 4).

Table 4 Party affiliation

Democrat	293	66.0%
Republican	38	8.6%
Independent	70	15.8%
Libertarian	16	3.6%
Green	16	3.6%
Other	11	2.5%

Ideologically the respondents leaned liberal: 86 (19.4%) extremely liberal, 207 (46.6%) liberal, 51 (11.5%) slightly liberal, 54 (12.2%) moderate, 19 (4.3%) slightly conservative, 26 (5.9%) conservative, and 1 (0.2%) extremely conservative (Figure 3).

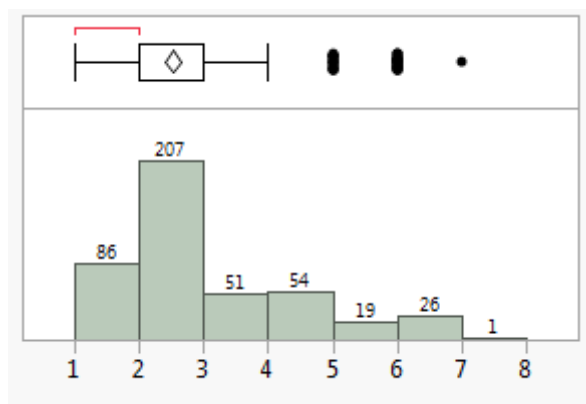


Figure 3 Ideology

1 = extremely liberal, 7 = extremely conservative,
 $M = 2.54$, $SD = 1.37$

Of particular interest in regard to the level of polarization was the extremity or intensity of ideology, that is how far from the middle or moderate respondents reported their ideological position. An additional independent variable was created by recoding ideological responses based on the distance from moderate or middle of the road: 4 became zero, 3 and 5 became one, 2 and 6 became two, 1 and 7 became three. This resulted in 54 (12.16%) middle of the road, 70 (15.77%) slightly ideological, 233 (52.48%) moderately ideological, and 87 (19.59%) extremely ideological (Figure 4)

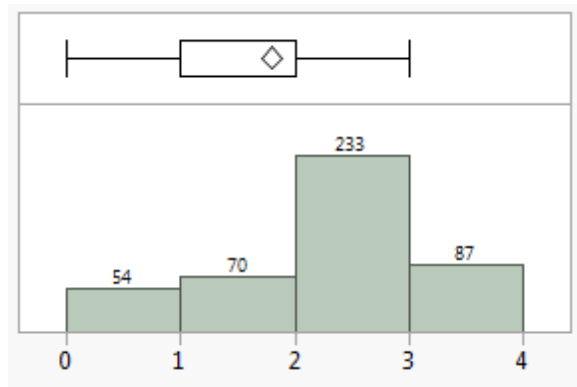


Figure 4 Intensity of ideology

$M=1.8$, $SD=0.89$

In addition to questions about party affiliation and ideology respondents were asked questions regarding the strength of their political and social beliefs. Respondents were asked to rate their level of political knowledge on a scale of one to seven to determine their perceived (subjective) level of knowledge on political and social issues. Overall respondents reported a high level of strength in their political beliefs, only 18.2% reported a moderate to weak level (Figure 5). On a one to seven scale, one being weak and seven being strong respondents reported: 102 (23%) seven, 157 (35.4%) six, 104 (23.4%) five, 66 (12.9%) four, moderate or middle of the road, 6 (1.4%) three, 5 (1.4%) two, and 4 (0.9%) one, or weak (Figure 5). The mean was 5.57 with standard deviation of 1.184.

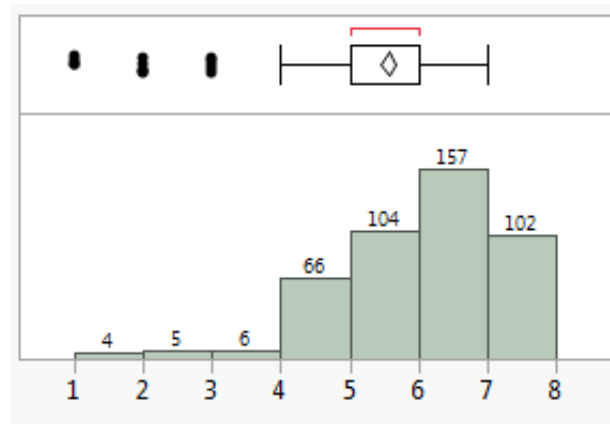


Figure 5 Strength of political views

$M=5.57$, $SD=1.184$

Similarly, only 32% of respondents reported that their level of political knowledge (perceived knowledge) was moderate to low (Figure 6). On a seven point scale, seven meaning an expert and one meaning little-to-no political knowledge, respondents reported; 16 (3.6%) seven, 127 (28.6%) six, 159 (35.8%) five, 109 (24.5%) four or moderate, 24 (5.4%) three, 8 (1.8%) two, and 1 (0.2%) one or little to no knowledge (Figure 6). The mean was 4.94 with standard deviation of 1.04. Both results correspond with high levels of polarization; polarized individuals have more confidence in their beliefs and believe them strongly.

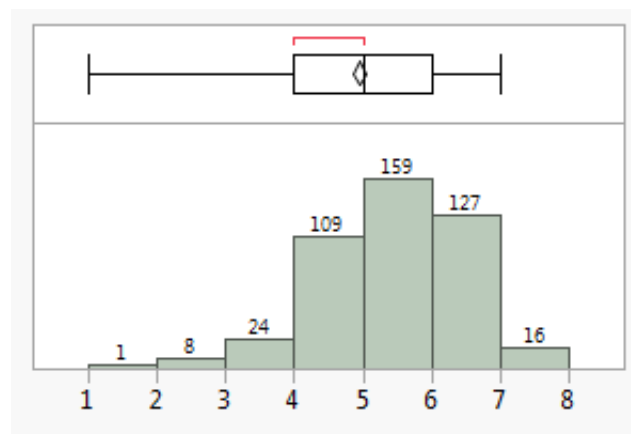


Figure 6 Level of perceived political knowledge

$M=4.94$, $SD=1.04$

Active Avoidance Behaviors

The survey included six questions designed to measure active avoidance of differing political perspectives on Facebook in the previous 12 months (Table 5). The most commonly reported behavior (53.38%) was hiding a post from a Friend that the respondent did not agree with about social or political issues. Hiding all posts from a Friend because of status updates or stories shared that the respondent did not agree with

regarding a social or political issue was the second most commonly reported active avoidance behavior (48.87%). Almost a third of respondents (32.88%) reported engaging in the most extreme active avoidance behavior; unFriending someone because of the political stories or opinions that Friend had shared.

Table 5 Active avoidance behaviors

Questions	Number of responses	Percentage
In the past 12 months have you:		
Hidden a post that you did not agree with from a friend about a political or social issue?	237	53.38%
Hidden all posts from a friend because you do not agree with the stories or opinions s/he posts about political or social issues?	217	48.87%
Unfriended a someone because you do not agree with the stories or opinions s/he posts about political or social issues?	145	32.66%
Unliked (unfollowed) a Page because of post about political or social issues that you do not agree with?	146	32.88%
Deleted comments that you found offensive or disagreeable on something you posted?	83	18.69%
Deleted something you posted when it resulted in disagreeable or offensive comments from others?	60	13.51%

An additional dependent variable was created by calculating the total number of active avoidance behaviors for each respondent producing a 0-6 scale, 0 being no reported active avoidance behaviors in the last 12 months and 6 being an affirmative answer to all of the active avoidance behaviors in the last six months. Over three-fourths (76.13%) of respondents reported at least one active avoidance behavior, and over half (55.41%) reported two or more active avoidance behaviors (Table 6).

Table 6 Total number of active avoidance behaviors reported

M=2, SD=1.66

Zero	106	23.87%
One	92	20.72%
Two	82	18.47%
Three	72	16.22%
Four	54	12.16%
Five	28	6.31%
Six	10	2.25%

Analysis

Hypotheses 1 and 2

Test H1: Those who identify as extremely liberal will report a higher number of active avoidance behaviors and H2: Those who identify as extremely conservative will report a higher number of active avoidance behaviors. I first estimated analysis of variance (ANOVA) models with the total active avoidance behaviors against ideology and intensity of ideology separately, neither of which produced significant results. I then estimated multiple regressions models against each active avoidance behavior separately

as well as against the sum total of the behaviors. None of these results were significant, thus failing to support hypothesis one and hypothesis two.

Intensity of ideology was significant in response to the question “In the last 12 months have you deleted comments that you found offensive or disagreeable on something you posted?” The analysis showed statistical significance in the intensity of ideology, with the zero to three scale coding distance from moderate or middle of the road. The initial analysis indicated that moderates are more likely to delete comments made by others on their own posts ($b=-0.072$, $SE=0.0288$, $p<0.05$). The intensity of ideology was not significant in any other active avoidance behavior. It may be that moderates wish to avoid polarizing political discussion on Facebook and therefore delete any comments on their own posts that project that type of opinion or level of discussion.

Hypothesis 3

For H3: Those who feel strongly about their political views will report a higher number of active avoidance behaviors, strength of political views was not significant in the ANOVA or any of the multiple regressions, thereby failing to support hypothesis three. Additional analysis of the data indicates that those who feel strongly about their political views might be actively seeking out and engaging in political activity on Facebook, rather than avoiding it as first expected.

Hypothesis 4

To test H4: Those who report a higher level of perceived political knowledge will report a higher number of active avoidance behaviors, ANOVA and multiple regressions

models were again estimated (Table 7). The results did not show statistical significance for level of perceived political knowledge and thus did not support hypothesis four. As with the strength of political views, it may be that those with higher levels of perceived political knowledge are actively engaging in political activities and discussions on Facebook rather than avoiding differing political perspectives.

Table 7 Regression model results: Active avoidance behaviors

Coefficients with standard errors in parenthesis

* $p < .05$ ** $p < .01$ *** $p < .005$ **** $p < .001$

	Hidden a post	Hidden news feed	UnFriended someone	Un-Liked a Page	Deleted other's comments	Deleted own post	Sum of avoidance behaviors
Party	-0.005 (0.019)	-0.011 (0.019)	-0.008 (0.018)	0.009 (0.018)	-0.006 (0.015)	0.003 (0.013)	-0.018 (0.063)
Ideology	-0.042 (0.024)	-0.044 (0.024)	0.003 (0.023)	-0.01 (0.022)	-0.033 (0.019)	-0.007 (0.017)	-0.133 (0.8)
Intensity of Ideology	-0.015 (0.037)	-0.011 (0.038)	0.046 (0.035)	0.017 (0.035)	-0.071* (0.029)	-0.036 (0.026)	-0.071 (0.123)
Strength of political views	0.037 (0.029)	0.052 (0.029)	0.005 (0.028)	-0.016 (0.027)	-0.018 (0.023)	-0.025 (0.02)	0.035 (0.096)
Perceived political knowledge	-0.009 (0.031)	-0.011 (0.032)	-0.004 (0.03)	-0.032 (0.029)	-0.019 (0.024)	0.014 (0.022)	-0.061 (0.104)
Frequency of political discussions on Facebook	0.004 (0.027)	-0.031 (0.028)	-0.026 (0.026)	-0.015 (0.025)	0.049* (0.021)	0.019 (0.019)	0.003 (0.09)
Engagement with political content on Facebook	0.015 (0.012)	0.003 (0.013)	0.024* (0.012)	0.04 (0.012)	0.01 (0.01)	0.015 (0.008)	0.107** (0.041)
Frequency of offline political discussions	-0.009 (0.028)	-0.03 (0.028)	-0.02 (0.027)	-0.008 (0.026)	0.006 (0.022)	-0.022 (0.019)	-0.083 (0.092)
Offline engagement with political activities	-0.007 (0.013)	-0.004 (0.014)	0.008 (0.013)	0.025**** (0.013)	0.018 (0.01)	0.01 (0.009)	0.049 (0.044)
Gender	0.147*** (0.051)	0.064 (0.052)	-0.036 (0.049)	0.04 (0.048)	-0.044 (0.04)	-0.008 (0.036)	0.163 (0.171)
Age	-0.001 (0.001)	-0.001 (0.001)	8.686 (0.001)	-0.001 (0.001)	-7.569 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Education	-0.013 (0.025)	0.011 (0.025)	-0.026 (0.024)	-0.047* (0.023)	-0.024 (0.019)	0.013 (0.017)	-0.108 (0.082)
Income	0.013 (0.008)	-0.002 (0.008)	-0.002 (0.007)	0.005 (0.007)	-0.002 (0.006)	-0.001 (0.005)	-0.015 (0.026)

Additional Results

Analysis of the data yielded some significant findings that were not anticipated with the hypotheses. First, those who reported that they encounter a higher amount of political content and discussions on Facebook also reported a higher number of active avoidance behaviors over all ($b = 0.113$, $SE = 0.04$, $p < .005$). This group was also more likely to report unFriending someone because of something that Friend posted related to political or social issues ($b = 0.025$, $SE = 0.011$, $p < .005$). Those with a higher number of reported encounters with political content on Facebook reported a higher level of self-moderation as well, being more likely to delete one of their own posts when that post resulted in disagreeable or offensive comments from others ($b = 0.016$, $SE = 0.008$, $p < .05$). This group is also more likely to hide a single post from a Friend ($b = 0.013$, $SE = 0.012$, $p < .05$). While it is not surprising that those who encounter more political or social content on Facebook engage in more active avoidance behavior it is surprising to see unFriending, the most extreme of the active avoidance behaviors as well as the high levels of self-moderation or censoring.

Nine questions were designed to determine the level of engagement with, and exposure to, political content on Facebook (Table 8). More than half (56.31%) reported engaging in 6 or more political activities on Facebook ranging from Liking a Page that posts political or social content to posting links to political stories or commenting or Liking the posts of others about political or social issues. The vast majority (96.17%) reported engaging in at least one political or social activity on Facebook.

Table 8 Sum of types of political encounters and activities on Facebook*M* = 5.613, *SD* = 2.794

Zero	17	3.83%
One	33	7.43%
Two	33	7.43%
Three	28	6.31%
Four	44	9.91%
Five	39	8.78%
Six	46	10.36%
Seven	40	9.01%
Eight	86	19.37%
Nine	78	17.57%

Second, those who reported greater frequency of political discussions on Facebook (Table 9) are more likely to delete comments from Friends that are disagreeable or offensive on their own posts ($b=0.053$, $SE=0.021$, $p<0.05$). Over a third (38.74%) of respondents reported discussing political or social issues on Facebook once a month or more often.

Table 9 Frequency of political and public affairs discussions Facebook*M* = 1.363, *SD* = 1.212

Never	132	29.73%
Less than once a month	140	31.53%
At least once a month	72	16.22%
At least once a week	79	17.79%
Every day	21	4.73%

Because the data failed to support any of the four hypotheses I began looking for possible alternative explanations for the behavior of those with strong ideology, strong political views, and high levels of perceived political knowledge. It may be that people who exhibit these traits are actively seeking out and engaging with political content on

Facebook rather than avoiding it. Although no survey questions were designed to measure active political engagement with differing political perspectives on Facebook some questions were designed to measure frequency of political discussions and the likelihood that respondents encountered political discussions on Facebook. Regression models were estimated (Table 10) with these dependent variables against the three independent variables of intensity of ideology, perceived level of political knowledge, and strength of political views; all models produced significant results in all areas. The higher the intensity of ideology the more likely a respondent was to discuss politics on Facebook ($b=0.387$, $SE=0.062$, $p<.0001$) and the more likely the respondent was to encounter or engage with political content on Facebook ($b=3.871$, $SE=0.98$, $p<.0001$). Those with stronger political views were more likely to engage in political discussions on Facebook ($b=0.483$, $SE=0.062$, $p<.0001$) and more likely to encounter political content ($b=0.483$, $SE=0.062$, $p<.0001$). Finally, those with a higher level of perceived political knowledge were more likely to discuss politics ($b=0.486$, $SE=0.05$, $p<.0001$) and more likely to encounter political content on Facebook ($b=1.174$, $SE=0.095$, $p<.0001$).

Table 10 Regression models results: Polarization variables by frequency of political and public affairs discussions Facebook

Coefficients with standard errors in parenthesis

**** $p<.0001$

	Discuss politics on Facebook	Encounter political content on Facebook
Intensity of ideology	0.387**** (0.062)	3.871**** (0.98)
Strength of political views	0.483**** (0.043)	1.258**** (0.095)
Perceived political knowledge	0.486**** (0.05)	1.174**** (0.114)

These findings indicate that rather than actively avoiding differing political perspectives polarized individuals, that is those with greater intensity of ideology, stronger political views, and higher levels of perceived political knowledge, are more likely to be exposed to and engage with political content. It may be that the high levels of confidence in their political views and the belief that their views are correct motivate the polarized to post more political content. They also associate with those who are polarized and so see more political content and discussion from their Facebook. Because of their strong beliefs and convictions rather than withdrawing from conflict the polarized engage with those who hold opposing political perspectives. It is possible that all of their political activities are happening within their echo chamber. Questions were not designed to determine if they were engaging with differing political perspectives.

I also examined responses to questions regarding offline political engagement. Over half (54.73%) of respondents reported discussing politics or public affairs either once a week or every day. Over three-fourths (77.48%) report discussing politics or public affair at least once a month or more frequently using offline methods.

Table 11 How often do you discuss politics and public affairs with others in person, by phone call, or by letter?

M=3.416, SD=1.036

Never	14	3.15%
Less than once a month	86	19.37%
At least once a month	101	22.75%
At least once a week	187	42.12%
Every day	56	12.61%

Nine questions were borrowed from the Pew Internet & American Life Project to determine the level of offline political activity and engagement. All respondents reported engaging in at least one offline political activity, and just under half (47.52%) reported engaging in four or more activities (Table 12).

Table 12 Sum of types of offline political activities and engagement

M=3.712, SD=2.091

Zero	0	0.00%
One	69	15.54%
Two	82	18.47%
Three	82	18.47%
Four	67	15.09%
Five	48	10.81%
Six	46	10.36%
Seven	23	5.18%
Eight	19	4.28%
Nine	8	1.80%

Regression models were estimated with the three variables designed to measure polarization against the frequency of offline political activities and engagement, all three models produced significant results (Table 13). Those with a higher intensity of ideology discuss politics more frequently ($b=0.206$, $SE=0.054$, $p<.0005$) and engage in more political activities offline ($b=0.4$, $SE=0.11$, $p<.0005$). Those with stronger political views discuss political and social issues more frequently ($b=0.607$, $SE=0.079$, $p<.0001$) and engage in more political activities offline ($b=0.391$, $SE=0.037$, $p<.0001$). Similarly those who reported high levels of political knowledge (perceived political knowledge) engage in political discussions more often ($b=0.462$, $SE=0.042$, $p<.0001$) and participate in more political activities offline ($b=0.832$, $SE=0.087$, $p<.0001$).

Table 13 Regression model results: polarization with offline political encounters

Coefficients with standard errors in parenthesis

*** $p < .0005$ **** $p < .0001$

	Discuss politics offline	Engage in political activity offline
Intensity of ideology	0.206*** (0.054)	0.4*** (0.11)
Strength of political views	0.608**** (0.079)	0.391**** (0.037)
Perceived political knowledge	0.462**** (0.042)	0.832**** (0.087)

These high levels of offline political discussion and engagement in political activity for those with intense ideology, strength of political views, and a high level of perceived political knowledge correspond with the levels of political discussions on the and engagement on Facebook. It appears that online activity and engagement are a reflection of offline activity and engagement (Table 14). Bivariate analysis of the frequency of political discussions on Facebook by offline political produced a coefficient of 0.513, standard error of 0.05, and $p < .0001$. Similarly the bivariate analysis of encounters of political discussions and content on Facebook by offline political engagement produced a coefficient of 0.605, standard error of 0.057, and $p < .0001$. Both results indicate a high correlation between offline political activity and discussion on the one hand and the frequency of political discussions and encounters of political content on Facebook on the other.

Table 14 Regression model results: Frequency of political discussions and engagement with political content on Facebook

Coefficients with standard errors in parenthesis

* $p < .05$ ** $p < .005$ *** $p < .0005$ **** $p < .0001$

	Frequency of political discussions on Facebook	Engagement with political content on Facebook
Party	0.035 (0.038)	0.012 (0.085)
Ideology	-0.044 (0.048)	-0.202 (0.107)
Intensity of Ideology	0.103 (0.075)	0.104 (0.165)
Strength of political views	0.234**** (0.056)	0.71**** (0.124)
Perceived political knowledge	0.075 (0.063)	0.144 (0.14)
Frequency of offline political discussions	0.241**** (0.055)	0.396*** (0.12)
Engagement with offline political activities	0.098*** (0.026)	0.332**** 0.058
Gender	-0.339** (0.103)	-0.1 (0.227)
Age	-0.0002 (0.0004)	-0.0001 (0.001)
Education	-0.013 (0.05)	0.015 (0.111)
Income	0.001 (0.016)	0.002 (0.034)

CHAPTER 5

CONCLUSION

This study sought to determine if, and how, the polarization of the American electorate affects active avoidance behavior on Facebook. The loose and numerous social connections that Facebook encourages increases the likelihood that users will be exposed to political content that differs from their own perspectives and that they will be unaware of the political or social views of their Friend before encountering them on Facebook. Facebook's unique platform allows for the study of a specific set of behaviors to avoid engaging with differing political perspectives. The data failed to support my four hypotheses however; there were interesting and significant findings.

Discussion

First, there was no indication that those with a greater ideological intensity, stronger political views, or higher levels of perceived political knowledge exhibit more or less active avoidance behaviors, compared to those with levels of these traits. Instead, the data show that, rather than avoiding differing political perspectives those with greater ideological intensity, strength of political views, or higher levels of perceived political knowledge may be seeking out political content or engaging with it when they encounter it. Those with greater ideological intensity, strength of political views, or higher levels of perceived political knowledge were more likely to discuss political and social issues on Facebook and to encounter content from others. All three of these variables are related to characteristics of polarization. It may be that the confidence and strength of conviction on

the correctness of their political views coupled with the belief in the ignorance or moral wrongness of those with differing political views motivates engagement. Polarized individuals may be motivated to attempt to educate those they believe to be less intelligent, correct those with low morals, or simply to mock those who hold a different set of political views.

Limitations

Based on the type of questions in the survey there is no way to know if the significantly higher levels of political discussions and encounters on Facebook for greater ideological intensity, strength of political views, or higher levels of perceived political knowledge indicate engagement with differing political perspectives. It may be that these discussions and encounters are with those with similar political views, which would support the echo chamber concerns of Sunstein and others. It may be that there is no importance in active avoidance behaviors by those with greater ideological intensity, strength of political views, or higher levels of perceived political knowledge because they are not encountering differing political perspectives, but rather engage in discussion and exchange of ideas and stories within their echo chambers.

Because the data were collected from a convenience sample of my SNS contacts the demographics are not representative of the U.S. electorate. Respondents skewed liberal, and female, and were more heavily educated than the U.S. population as a whole. This may result in attenuated regression parameter estimates and thereby reduce the opportunity to detect statistically significant results.

While the sample skewed female and liberal, the education and income levels are reflective of Internet users. Those with higher income and education levels are significantly more likely to be online (Zichuhr, 2013). Whites and Blacks are more likely to be online than other minority groups (Zichuhr, 2013). It should be noted that non-whites, those with low income levels, and lower education levels are more likely to use a mobile phones as their primary or only Internet access point (Duggan & Smith, 2013). Some or all of the Facebook activities measured in these research questions are more difficult or not possible on mobile devices.

Contribution

The majority of the writing about polarization addresses the possibility for voters to isolate themselves with likeminded individuals, but does not explore if this is actually happening. Some research explores polarization and echo chambers by looking at comments on online news websites (Harris et al., 2013) or political blogs (Adamic & Glance, 2005) or Twitter interactions (Rainie & Smith, 2012a; 2012b; Smith, 2013; Smith et al., 2014; Yardi & boyd, 2010). This research examined at political behavior on Facebook. With the wide use of Facebook for a variety of purposes, including connections with classmates, family, friends, coworkers, and Friends of Friends, individuals were more likely to be exposed to a variety of political perspectives (Horrigan et al., 2004). Creating the potential for interactions and reactions that could be measured.

This research contributes to the literature in a number of ways. First, it focuses on political behavior related to SNSs specifically. The majority of the literature to date has focused on online services that pull users to the site or service. Blogs, online news sites,

and listservs require that Internet users actively seek out and engage with the content posted there. It is unlikely that accidental encounters of conflicting political perspectives will occur. Internet users who are likely to actively seek political perspectives that challenge their own views are more likely to be politically engaged in general (Lawrence et al., 2010) and are likely to have a higher than average interest in political issues (Horrigan et al., 2004). The push functionality of Facebook, pushing the activity of a user's Facebook Friends into the news feed, creates the opportunity for accidental exposure to differing political perspectives as well as intentional exposure. Facebook pushes the status updates, links, likes, photos, and other shared content of Friends and Pages to users. This push technology makes it more likely that Facebook users will encounter differing political perspectives without actively seeking to do so (Horrigan et al., 2004).

Second, this research focuses on SNSs – and specifically Facebook. People use different SNSs for different purposes (boyd & Ellison, 2008). Unlike the majority of other SNSs Facebook requires that individuals use their real names when creating a Facebook profile (Facebook's Name Policy, n.d.). This removes the veil of anonymity from Facebook interactions, so that users' political activity is done in full view of their Friends. This may result in different answers than those that are received to questions that ask about SNS in general.

Potential Future Research

Future research could include an additional set of questions to determine levels of positive active engagement with differing political perspectives on Facebook, to

determine if participants are actively engaging with content of similar and differing political perspectives. Questions should attempt to determine the motivations for engagement as well as levels of engagement with similar and differing political and social views. It may be that engagement is intended to correct or mock the behavior of those with differing political perspectives. It also maybe that engagement is limited to positive interactions with homogenous perspectives resulting in an echo chamber effect. In that case engagement would not be considered productive deliberation.

The addition of variables intended to measure polarization would also be beneficial. Possible questions include asking respondents to rate the morality or intelligence of those with differing political views. This would address the claims of some that the electorate is not polarized just better sorted as well as provide additional measures for the levels of polarization. Finally, a sample that is more diverse and representative of the U.S. electorate as a whole would be beneficial.

The correlation between online and offline behavior could be valuable in future research regarding the offline behavior of the polarized electorate. Concerns about the behavior of polarized individuals, especially the tendency to ensconce themselves in an echo chamber and surrounding themselves with likeminded individuals can be hard to measure offline. An individual's choice to disengage with someone who holds and shares a differing perspective on political and social issues can be explained by circumstances not related to political or social issues. For example, lack of time, a new job, a new relationship, or relocation could be offered as a reason, and may well be believed by those affected. The Internet and social media provide a series of tools and specific behaviors that allow for the measurement of active avoidance as well as active

engagement behavior. Facebook requires specific behavior to actively avoid differing political perspectives. It also requires specific behavior to positively engage with homogenous social and political views, for example joining a Group, Liking a Page, Liking the status update of a Friend, or sharing content posted by others that you agree with. This active behavior could be measured using a series of questions designed to determine if individuals are engaging in political behavior on Facebook, if they are engaging with homogenous or heterogeneous political or social views, and the nature of that engagement. It is important to determine the nature of the engagement to be able to conclude if the interactions are reflective of deliberation including understanding and recognition of differing views, or rather if the engagement is intended to mock or antagonize those with differing views.

REFERENCES

- Abramowitz, A. (2010). Transformation and polarization: The 2008 presidential election and the new American electorate. *Electoral Studies*, 29(4), 594-603.
- Abramowitz, A. I., & Saunders, K. L. (2008). Is polarization a myth? *The Journal of Politics*, 70(2). doi:10.1017/S0022381608080493
- Academic Solutions. (n.d.). *Qualtrics*. Retrieved from <http://qualtrics.com/research-suite/academic-solutions/>
- Adamic, L., & Glance, N. (2005). The political blogosphere and the 2004 U.S. election : divided they blog. In *Proceedings of The 3rd International Workshop On Link Discovery* (pp. 36 – 43). New York: ACM. doi:10.1145/1134271.1134277
- ALA Demographics Study (2013). *Research & statistics*. American Library Association. Retrieved from <http://www.ala.org/offices/ors>
- Barber, M., & McCarty, N. (2013) Causes and consequences of polarization. In J. Mansbridge & C. J. Martin (Eds.) *Negotiating agreement in politics*, Washington D.C.: American Political Science Association.
- Brasted, M.C. (2012) *Moveon: the rhetoric of polarization*. Communication faculty publications. Paper 2. Retrieved from http://digitalcommons.brockport.edu/cmc_facpub/2
- Buchstein, H. (1997). Bytes that bite: The Internet and deliberative democracy. *Constellations*, 4(2), 248–263. doi:10.1111/1467-8675.00052
- boyd, d.m., & Ellison, N.B. (2008) Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13, 210–230. doi:10.1111/j.1083-6101.2007.00393.x
- Burton, S., & Netemeyer, R. G. (1992). The effect of enduring, situational, and response involvement on preference stability in the context of voting behavior. *Psychology & Marketing*, 9(2), 143-156.
- Coffey, B., & Woolworth, S. (2004). “Destroy the scum, and then neuter their families”: the web forum as a vehicle for community discourse? *The Social Science Journal*, 41(1), 1–14. doi:10.1016/j.soscij.2003.10.001
- Danzig, C. (2012, March 19). When anonymous commenting goes real wrong. *Above the Law*. Retrieved from <http://abovethelaw.com/2012/03/when-anonymous-commenting-goes-real-wrong/>
- DiMaggio, P., Evans, J., & Bryson, B. (1996). Have American’s social attitudes become more polarized? *American Journal of Sociology*, 102(3), 690-755.


- Duggan, M., Smith, A. (2013) *Cell Internet Use 2013*. Washington DC: Pew Internet & American Life Project.
- Email [Def. 2]. 2013. *OED Online*. Oxford University Press. Retrieved from <http://www.oed.com/view/Entry/60701>
- Evans, J. H. (2003). Have Americans' attitudes become more polarized? - an update. *Social Science Quarterly*, 84(1), 71–90.
- Facebook's name policy. (n.d.). *Welcome to Facebook*. Retrieved from <https://www.facebook.com/help/292517374180078>
- Farrell, H. (2012). The consequences of the Internet for politics. *Annual Review of Political Science*, 15(1), 35–52. doi:10.1146/annurev-polisci-030810-110815
- Favoriting a Tweet. (n.d.). Retrieved from <https://support.twitter.com/articles/20169874-favoriting-a-tweet>
- Fiorina, M. P., Abrams, S. J., & Pope, J. (2005). *Culture war?: The myth of a polarized America*. New York: Pearson Longman.
- Flynn, L.R., Goldsmith, R.E. (1999). A short, reliable measure of subjective knowledge. *Journal of Business Research*. 46(1), 57-66.
- Gastil, J. & Dillard J.P. (1999) Increasing political sophistication through public deliberation. *Political Communication* 16(1): 3–23.
- Hacker, K., Coombs, M., Weaver, C., & McCulloh, G. (2006). Possible uses of blogs and computer mediated communication (CMC) for depolarizing political discourse. Presented to *Communication and Technology Division of the International Communication Association* (1–45). Desden, Germany.
- Halpern, D. & Gibbs, J. (2013) Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for Political expression. *Computers in Human Behavior*. 29, 1159-1168. DOI:10.1016/j.chb.2012.10.008
- Harris, B. D., Morgan, C. V, & Gibbs, B. G. (2013). Evidence of political moderation over time: Utah's immigration debate online. *New Media & Society* . doi:10.1177/1461444813504262
- Hatcher, J. (2009, November 6). Let's end anonymous comments. *The Poynter Institute*. Retrieved from <http://www.poynter.org/uncategorized/99272/lets-end-anonymous-comments/>
- How news feed works. (n.d.). Retrieved October 27, 2013, from <https://www.facebook.com/help/327131014036297>

- Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology a social identity perspective on polarization. *Public Opinion Quarterly*, 76(3), 405-431.
- Kelly, J., Fisher, D., & Smith, M. (2005). Debate, division, and diversity: political discourse networks in USENET newsgroups. Paper prepared for *Online Deliberation Conference*. Stanford, CA.
- Kim, Y. (2011). The contribution of social network sites to exposure to political difference: The relationships among SNSs, online political messaging, and exposure to cross-cutting perspectives. *Computers in Human Behavior*, 27(2), 971-977. doi:10.1016/j.chb.2010.12.001
- Lapidot-Lefler, N., & Barak, A. (2012). Effects of anonymity, invisibility, and lack of eye-contact on toxic online disinhibition. *Computers in Human Behavior*, 28(2), 434-443. doi:10.1016/j.chb.2011.10.014
- Lawrence, E., Sides, J., & Farrell, H. (2010). Self-segregation or deliberation? Blog readership, participation, and polarization in American politics. *Perspectives on Politics*, 8(01), 141. doi:10.1017/S1537592709992714
- Learn the basics. (n.d.). Retrieved from <https://discover.twitter.com/learn-more#tweet>
- Like. (n.d.). Retrieved from <http://www.facebook.com/help/like>
- Mitchell, A., Kiley, J., Gottfried, J., & Guskin, E. (2013) *The role of news on Facebook common yet incidental*. Washington D.C.: Pew Research Center
- Moore, M. J., Nakano, T., Enomoto, A., & Suda, T. (2012). Anonymity and roles associated with aggressive posts in an online forum. *Computers in Human Behavior*, 28(3), 861-867. doi:10.1016/j.chb.2011.12.005
- Mutz, D. C. (2006). *Hearing the other side: Deliberative versus participatory democracy*. Cambridge: Cambridge University Press.
- Mutz, D. C., & Martin, P. S. (2001). Facilitating communication across lines of political difference: the role of mass media. *The American Political Science Review*, 95(1), 97-114.
- Mutz, D. C., & Young, L. (2011). Communication and public opinion: Plus ca change? *Public Opinion Quarterly*, 75(5), 1018-1044. doi:10.1093/poq/nfr052
- Negroponte N. (1995). *Being digital*. New York: Knopf.
- O'Cass A. (2002). A micro-model of voter choice: understanding the dynamics of Australian voter characteristics in a federal by-election. *Psychology & Marketing*, 19(12), 1025-1046.

- O'Cass, A. & Pecotich, A. (2005). The dynamics of voter behavior and influence process in electoral markets: a consumer behavior perspective. *Journal of Business Research*, 58, 406-413.
- Pages Basics. (n.d.). Retrieved from <https://www.facebook.com/help/281592001947683/>
- Pew Research Center for People and the Press. (2012, August 23). A closer look at the parties in 2012 [blog post]. Retrieved from <http://www.people-press.org/2012/08/23/a-closer-look-at-the-parties-in-2012/>
- Rainie, L., Smith, A., Schlozman, K. L., Brady, H., & Verba, S. (2012). *Social media and political engagement*. Washington DC: Pew Internet & American Life Project.
- Rainie, L. & Smith, A. (2012a) *Social networking sites and politics*. Washington DC: Pew Internet & American Life Project.
- Rainie, L. & Smith, A. (2012b) *Politics on social networking sites*. Washington DC: Pew Internet & American Life Project.
- Shaw, D. (2012, October). If everyone votes their party, why do presidential election outcomes vary so much?. *The Forum*, 10(3), 1.
- Sibona, C. (2013, 7-10 Jan). *Facebook fallout: future contact avoidance after being unfriended on Facebook*. Paper presented at 2013 46th Hawaii International Conference on System Sciences. DOI: 10.1109/HICSS.2013.229
- Smith, A. (2013) *Civic engagement in the digital age*. Washington DC: Pew Internet & American Life Project.
- Smith, M.A., Rainie, L., Himelboim, I., Shneiderman, B. (2014) *Mapping Twitter topic networks: from polarized crowds to community clusters*. Washington DC: Pew Research Center.
- Stroud, N. J. (2010). Polarization and partisan selective exposure. *Journal of Communication*, 60(3), 556–576. doi:10.1111/j.1460-2466.2010.01497.x
- Sunstein, C. R. (2007). *Republic.com 2.0*. [Kindle Edition] Princeton: Princeton University Press.
- United State Census Bureau. (n.d.) Age and sex - people and households. Retrieved from <http://www.census.gov/population/age/>
- Using hashtags on Twitter. (n.d.). *Twitter Help Center*. Retrieved from <https://support.twitter.com/articles/49309-using-hashtags-on-twitter>
- Valentino, N. A., Banks, A. J., Hutchings, V. L., & Davis, A. K. (2009). Selective exposure in the internet age: the interaction between anxiety and information utility. *Political Psychology*, 30(4), 591–613. doi:10.1111/j.1467-9221.2009.00716.x


- Wagner, K. (2013, August 6). Facebook: here's how your news feed work. *Mashable*. Retrieved from <http://mashable.com/2013/08/06/facebook-news-feed-works/>
- Weblog [Def. 2]. 2013. *OED Online*. Oxford University Press. Retrieved from <http://www.oed.com/view/Entry/256743>
- Witschge, T. (2004). Online deliberation: Possibilities of the Internet for deliberative democracy. In P. M. Shane (Ed.), *Democracy online: The prospects for political renewal through the internet*. (pp. 109–122). New York: Routledge.
- Yardi, S., & boyd, d. (2010). Dynamic debates: an analysis of group polarization over time on twitter. *Bulletin of Science, Technology & Society*, 30(5), 316–327. doi:10.1177/0270467610380011
- Zickuhr, K. (2013). *Who's not online and why*. Washington D.C.: Pew Internet & American Life Project.

APPENDIX



Thank you for agreeing to participate in this survey. The goal of this survey is to learn more about people like you who use Facebook. It is intended for U.S. citizens age 18 and over who have a Facebook account. As a reminder, your participation in this survey is voluntary and your answers are confidential. The survey should take about 15 minutes to complete.

>>




Are you a United States citizen?

☐ No

☐ Yes

<< >>




Are you 18 years of age or older?

☐ No

☐ Yes

<< >>



Generally speaking, which political party do you usually identify with?

☐ Democrat

☐ Republican

☐ Independent

☐ Libertarian

☐ Green

☐ Other

How liberal or conservative do you consider yourself?

☐ extremely liberal

☐ liberal

☐ slightly liberal

☐ moderate; middle of the road

☐ slightly conservative

☐ conservative

☐ extremely conservative

On a scale of 1 to 7 (7 being the highest) how strongly do you feel about your political views?

- ☐ 1 weak
- ☐ 2
- ☐ 3
- ☐ 4 moderate; middle of the road
- ☐ 5
- ☐ 6
- ☐ 7 strongly

On a scale of 1 to 7 (7 being the highest) how knowledgeable are you about political and social issues?

- ☐ 1 I know nothing about politics or social issues
- ☐ 2
- ☐ 3
- ☐ 4 I am moderately knowledgeable
- ☐ 5
- ☐ 6
- ☐ 7 I am an expert in political and social

<<

>>



The following section consists of questions regarding your offline political activity.

How often do you discuss politics and public affairs with others in person, by phone call, or by letter?

- ☐ never
- ☐ less than once a month
- ☐ at least once a month
- ☐ at least once a week
- ☐ everyday

Here's a list of activities some people might do. For each, please indicate if you have done this activity in the past 12 months.

Attended a political rally or speech

- ☐ No
- ☐ Yes

Attended an organized protest of any kind

- ☐ No
☐ Yes

Attended a political meeting on local, town, or school affairs

- ☐ No
☐ Yes

Worked or volunteered for a political party or candidate

- ☐ No
☐ Yes

Been an active member of any group that tries to influence public policy or government, not including a political party


- ☐ No
☐ Yes

Worked with fellow citizens to solve a problem in your community

- ☐ No
☐ Yes

<<

>>



Here is another list of activities some people do and others do not. For each, please indicate if you have done this activity in the past 12 months.

Contacted a national, state or local government official in person, by phone call or by letter about an issue that is important to you

☐ No
☐ Yes

Signed a paper petition

☐ No
☐ Yes

Sent a "letter to the editor" by regular mail to a newspaper or magazine

☐ No
☐ Yes

Called into a live radio or TV show to express an opinion

☐ No
☐ Yes

<< >>



Now please think about your Facebook activity specifically.

How often do you discuss politics and public affairs with others on Facebook?

- ☐ never
- ☐ less than once a month
- ☐ at least once a month
- ☐ at least once a week
- ☐ every day

Do you currently belong to a group that is involved in political or social issues, or that is working to advance a cause?

- ☐ No
- ☐ Yes

Do you follow (like) the Page(s) of any elected officials, candidates for office or other political figures?

- ☐ No
- ☐ Yes

Do you follow (like) any Page(s) that make statements about political or social issues or causes?

- ☐ No
- ☐ Yes

Do you post links to political stories or articles for others to read?

- ☐ No
☐ Yes

Do you post your own thoughts or comments on political or social issues?

- ☐ No
☐ Yes

Do you encourage other people to take action on a political or social issue that is important to you?

- ☐ No
☐ Yes

Do you encourage other people to vote?

- ☐ No
☐ Yes

Do you repost content related to political or social issues that was originally posted by someone else?

- ☐ No
☐ Yes

Do you like, comment on, or promote material related to political or social issues that others have posted?

- ☐ No
☐ Yes

<<

>>



Now please think about your Facebook activities in the last 12 months. Have you:

Hidden a post that you did not agree with from a friend about a political or social issue?

- ☐ No
- ☐ Yes

Hidden all posts (the news feed) from a friend because you do not agree with the stories or opinions s/he posts about political or social issues?

- ☐ No
- ☐ Yes

Unfriended a someone because you do not agree with the stories or opinions s/he posts about political or social issues?

- ☐ No
- ☐ Yes

Unfollowed (unliked) a Page because of one or more posts about political or social issues that you do not agree with?

- ☐ No
- ☐ Yes

Deleted comments that you found offensive or disagreeable on something you posted?

- ☐ No
☐ Yes

Deleted something you posted when it resulted in disagreeable or offensive comments from others?

- ☐ No
☐ Yes

<<

>>



The following questions ask about some of your personal characteristics.

What is your gender?

- ☐ Male
- ☐ Female
- ☐ Other

In what year were you born?

With which of the following racial/ethnic categories do you associate yourself (please select all that apply)?

- ☐ White
- ☐ Black or African American
- ☐ Native Hawaiian or Pacific Islander
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Latino
- ☐ Other

What is the highest level of education you received in school?

- ☐ none (never finished elementary school)
- ☐ elementary school diploma
- ☐ high school diploma or the equivalent (GED)
- ☐ associate degree
- ☐ bachelor's degree
- ☐ master's degree
- ☐ professional degree (MD, DDS, DVM, LLB, JD, DD)
- ☐ doctorate degree

Below is a list of income categories. Please choose the category that represents that approximate household income from employment and all other sources for all members of your household before taxes, last year.

- ☐ Less than \$10,000
- ☐ \$10,000 to \$19,999
- ☐ \$20,000 to \$29,999
- ☐ \$30,000 to \$39,999
- ☐ \$40,000 to \$49,999
- ☐ \$50,000 to \$59,999
- ☐ \$60,000 to \$69,999
- ☐ \$70,000 to \$79,999
- ☐ \$80,000 to \$89,999
- ☐ \$90,000 to \$99,999
- ☐ \$100,000 to \$149,999
- ☐ \$150,000 and over
- ☐ Prefer not to answer

<<

>>