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The effect of the Internet on the civic engagement and voting behavior of young Americans

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The effect of the Internet on the civic engagement and voting behavior of young Americans

by

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Introduction

In today's political world the views of young Americans are continually discounted. The issues they value are ignored and programs beneficial to their needs, such as Federal Student Financial Aid, are regularly cut in an attempt to balance the budget. An estimated 12 billion dollars was cut for the 2006 fiscal year (Kantrowitz 2008). It is possible that these programs are cut because young Americans are disengaged from civic life, and thus are the least likely to vote of any eligible age group. However, election returns from 2004 show a reversal in turnout. An 11 percentage point increase, from 36 to 47 percent, was seen for the youngest voters, those 18 to 24 years old (Lopez, Kirby, and Sagoff 2005). This increase in turnout naturally leads to the question: is the increase in turnout in 2004 a fluke or is it symptomatic of a change in the habits of young Americans?

Much attention has focused on the increased role of the Internet in American life. Between 2000 and 2007 the percentage of Americans who report going online jumped significantly from 43% in March, 2000 to 75% in December, 2007. However, when this population is broken down by age it is found that 92% of adults between the ages of 18 and 29 report using the Internet regularly. In addition, as of 2007, 211 million citizens had Internet access, roughly 70% of the population (Pew Internet and American Life Project 2008).

Before the 2004 presidential election, little was said about the possible influence of Internet Websites, chatrooms, or Web Logs on election outcomes. This, however, changed dramatically. MoveOn.org received much attention for the roughly $11 million it raised and distributed to political candidates and, for the first time during an election, the mainstream

media made reference to online media, specifically to blogs such as "The Drudge Report." NBC News even invited bloggers to observe up close their election night coverage (Walker 2004). Not surprisingly, numerous mainstream media outlets such as "USA Today", CNN, and CBS News created their own blogs for the 2004 election. They were not alone; in fact, both George W. Bush and John Kerry maintained campaign blogs during the 2004 general election (Rice 2004). This rapid growth in the number and importance of blogs naturally leads to the question: is there any relationship between the recent increase in the turnout of young Americans and the emergence of Internet based media? This paper will examine original research regarding the Internet and civic engagement with the express purpose of discovering what, if any, effect the Internet has on the civic engagement and voting intention of young adults.

Critics could easily say that there is little point in studying the civic patterns of young adults because young adults seldom vote. However, this view may be rather short sighted seeing as turnout of those 18 to 24 increased 11 percentage points in the 2004 presidential election. If this increase in turnout is part of a larger trend young adults have the potential to become a much more influential voting block. In the 2004 election seven states were won with margins of less than 3%. It is not hard to see how a couple thousand votes could change the outcome in a few states or even the nation. Young adults could substantially alter the issues discussed and policy advocated if they turned out at higher rates. The untapped potential of young Americans makes for very interesting and relevant research

From here I will examine the relevant research on voter turnout, civic engagement, and online media usage. I will then propose and explain testable hypotheses that will allow

me to understand better what, if any, effect the Internet is having on the civic engagement and turnout of young Americans. A discussion of my methods for testing these hypotheses will be given before I explain and critique my findings. I will then end with a general discussion of how my findings support my thesis, a discussion of relevant problems, and suggestions for further research.

Previous Research

We begin by looking at traditional indicators of civic engagement in America. According to Delli Carpini (2000), they are trust, interest in public affairs, pride in American citizenship, knowledge about politics, consumption of daily news, turnout, and participation in clubs or organizations that had a government focus. Deli Carpini finds, as of 2000, all of these indicators to be in decline for all segments of the population. This tells us that young adults are disengaged from civic life at all levels, or at least they were until the 2004 elections.

Deli Carpini's finding raises the question: Is voter turnout in decline for all segments of the population, or is this decline more pronounced for different segments of the population such as younger Americans? William Galston (2004) found that voter turnout for younger Americans has been in decline since the 1970's. During the early 1970's, half of adults 18 to 29 voted in presidential elections. By 2000 this percentage dropped to one-third. This same decline can be seen in congressional elections. Galston's findings are consistent with those of Lavine and Lopez (2002), who found that voter turnout has been in decline since 1972, the first election in which those between the ages of 18 to 21 were enfranchised. This decline is greatest among 18 to 24 year-olds, an overall decline of 15 percentage points as compared with a four percentage point decline for the voting population as a whole. Also of note, the proportion of the electorate that was between the ages of 18 and 25 fell from 14.2% in 1972 to 7.8% in 2000. Lavine and Lopez's findings suggest that the inclusion of 18 to 21 year-olds in the electorate is chiefly responsible for the decline that is seen in voter turnout among young Americans. If their suggestion is correct, it is reasonable to assume that the rate of

voter turnout would stabilize after a few elections. However, this did not occur; turnout continued to decrease for roughly the next 30 years.

Lavine and Lopez's assertion that 18 to 21 year-olds vote at lower rates than other members of the electorate makes intuitive sense. However, they do not explain why there is such a low rate of turnout today. This leads to the question of whether it is common to see low rates of voter turnout among younger Americans. Nie, Verba, and Kim (1974) found that there is a great deal of regularity in the relationship between age and political participation. Their research shows decreased levels of political participation among both young and old. The authors are able to partially explain this decline by controlling for level of education. When education is held constant, they find that the elderly participate at the same rate as the average citizen. Education also increases the level of turnout in younger voters, which means that with less education these individuals would vote at even lower rates. Nie, Verba, and Kim feel that the lower levels of participation amongst these groups are best explained as problems of start up and slow down. Young adults do not participate because they are not yet connected to their community, while older adults stay active until they leave the workforce.

These findings coincide with the 1980 theory of adult roles set forth by Wolfinger and Rosenstone and Abramson, Aldrich, and Rohde's emphasis on lifestyle phenomena. Both works explain the low levels of young adult turnout as a result of not experiencing key life events such as: finishing school, establishing a career, getting married, having children, and settling in a permanent location. Converse and Niemi (1971) concluded that finding a career and a mate are the most important of these events. All authors feel that achieving these

landmarks dominates the finite time of young adults, leaving them with little time to engage in politics and its ancillaries, such as voting.

From these articles one finds support for the work of Lavine and Lopez because their findings strengthen the idea that we should expect lower levels of turnout from younger adults. Thus, including younger adults who have not yet passed these markers of adulthood in the electorate should explain the decreased levels of turnout. This appears to be a good explanation but it falls apart because it does not tell us what life events increase turnout among young adults.

However, the work of Highton and Wolfinger (2001) who test the adult roles theory using multivariate analysis, provides a clearer picture of which events in the life of a young adult actually affect turnout. The authors find that undertaking adult roles does not uniformly or appreciably increase the turnout of young Americans. It was found that leaving home, a life transition not considered by either author, along with entering the labor force, are the two variables that actually predicted increased turnout. In contrast, leaving school was associated with a substantial decline in turnout. They hold that students at any level have higher rates of participation because the campus environment provides students with a wealth of information and numerous opportunities to register and vote.

Of those variables not exclusively seen among the young, marriage had a slight negative impact, while residential mobility, indisputably considered to be the cause of much nonvoting, was not characteristic of the very youngest members of the electorate and therefore has limited utility in explaining their low turnout.

Further, Highton and Wolfinger found that the probability of voting was found to be

only 5.9 percentage points higher for a young person who has assumed all six adult roles: residential stability, marriage, home ownership, permanent employment, completion of education, and separation from parents, than for a young adult who has assumed none of the roles. This prediction does not come close to explaining the 37 percentage point turnout gap between adults 18-24 and those in their 60s. This research is very helpful because it tells us that we need to look beyond lifestage for an explanation. This argument is strengthened by the fact that a study, *The Youth Vote 2004*, conducted by The Center for Information & Research on Civic Learning & Engagement, found an increase in youth voter turnout in 2004.

Upon review of the turnout literature it is clear that as age increases so does turnout. It is also clear that the level of turnout is in greater decline among younger generations. Because this continued decline is not explained by traditional predictors of turnout another explanation must be sought. To understand if the decline in turnout is a unique event or symptomatic of a larger trend we must look beyond the literature on turnout to the literature on civic engagement. This makes sense because turnout is just one measure of civic engagement. Obtaining a more general understanding of young Americans' connection with society allows us to better examine if decreased turnout may be part of a much larger trend. If the trend transcends turnout many other factors must be considered if the correct explanatory variable is to be found.

Civic engagement and social capital are talked about interchangeably throughout the political science literature. Therefore, this paper treats the two as one and the same. Broadly defined, social capital is an individual's connectedness to others in the community.

According to Zhang and Chia (2006), social capital has two dimensions: trust and social connectedness. Scholars involved in the social capital and civic engagement debate generally agree that social networks and norms are strongly related to the health of democratic governance. However, they focus on different aspects of democracy and therefore end up examining different causes of civic engagement. Civic engagement and social capital thus have been approached theoretically in three different ways.

Pierre Bourdieu (1986) focuses on unequal access to resources via the possession of more or less durable relationships. He emphasizes that differing access to capital is not an individual's pursuit of self-interest. Also crucial is the assertion that fundamental structures that produce and reproduce access to social capital are not self-regulating markets but networks of connections. For Bourdieu, "the volume of the social capital possessed by a given agent... depends on the size of the network of connections he can effectively mobilize and on the volume of the capital possessed in his own right by each of those to whom he is connected" (Bourdieu 1986, 249).

James Coleman (Zhang and Chia, 2006) believes social capital is grounded in rational choice theory, which presumes that all human behavior results from individuals pursuing their own interests, at the expense of others if necessary. Cooperation and trust are deviations from the norm. However, if individuals choose to cooperate with others, they are doing so because it is in their interest to do so. Essentially, cooperation only exists when people believe it is the best way of achieving their personal goals. Coleman argues that social capital is a social-structural resource that is only available in and through relationships

and social structures. He disagrees with the notion of generalized social trust predominant in the political science literature emphasizing a social structural approach to social capital.

In contrast, Robert Putnam (1995) emphasizes norms, trust, reciprocity, social networks, and cooperative actions. His approach has been the most influential, spawning much empirical work since the appearance of his original argument made in *Bowling Alone* (2000). Unlike Putnam, Bourdieu and Coleman essentially treat mass media as constant. This is why most communication research has only responded to Putnam's arguments. Because this discussion examines the effects of the Internet, Putnam's approach will serve as a reference point for the rest of the discussion of social capital.

In the article "Tuning In, Tuning Out: The Strange Disappearance of Social Capital in America", the precursor to his book *Bowling Alone: The Collapse and Revival of American Community*, Putnam investigates why civic participation has declined despite the fact that interest in politics has remained steady and has grown in recent years. This decline holds steady across education, place of residence, and gender. This is interesting, seeing as education is one of the best predictors of civic engagement. Mobility and amount of time spent working also had no effect. Race was found to have an effect. African Americans, because of historical experiences, reported less social trust. However, all races showed declines in civic participation regardless of views of other groups. Age was found to have an effect. Older adults belong to organizations, vote, and read newspapers at higher levels than younger adults. However, it was not found that those who were born after the 1940's continued the life cycle pattern of increased engagements. All these activities were found to

be associated with trust. Putnam, unlike Coleman, who rejects the importance of generalized social trust, believes trust to be a key predictor of civic engagement.

Putnam suggests television viewing to be a likely culprit of civic decline, sucking up 40% of free time. Television viewing, in marked contrast to newspaper reading, is associated with lower rates of social trust, group membership, and voter turnout. High rates of viewing have been found among adolescents and pre-teens (Putnam 1995). If Putnam is correct, the increased amount of television viewing could be responsible for the overall decline in civic engagement of young adults, via the destruction of trust, which in turn might explain the overall decline seen in turnout.

This argument, while provocative and interesting, tells the reader little of why social capital is important. This is addressed in Putnam's 2001 article "Social Capital: Measurement and Consequences". Putnam notes that social capital has both public and personal returns and can create positive and negative outcomes. Personal happiness was found to be related to the level of social capital of the individual and the state in which s/he resided. High levels of social capital were found to be the best predictors of low murder rates, an even better predictor than poverty, traditionally thought to be the best indicator. Even simple acts, such as smiling at strangers seen regularly, are important forms of social capital. Evidence suggests that these strangers are more likely to provide assistance in an emergency.

Now that we understand how beneficial social capital is, we can examine research surrounding Putnam's claim that television is responsible for the decline of civic life, especially among young Americans. Research by Berman and Stookey, "Adolescents,

Television, and Support for Government" (1980), finds that support for government is negatively correlated with increased amounts of television viewing. This decreased support for government varies in affective directions with the types of programs young adults watch. Interestingly, programs geared toward adults result in negative support while programs geared toward adolescents are positively related to support for government. Extent of television viewing was operationalized by number of hours watched. Support for government was broken down to the national, state, and local levels. State governments were found to have higher levels of support than both their national and city counterparts. These findings are important because Putnam tells us that interpersonal trust is an indicator for trust in government. Thus the finding that increased television viewing decreases trust in government suggests that viewing has decreased trust at multiple levels, lending credence to Putnam's claim that television is destroying civic engagement.

Pasek, Kenski, Romer, and Jamieson (2006) found that those who watched the most television watched for entertainment purposes. They also found that following entertainment programs was positively related to civic activity among young adults. Prior (2005) found large gaps in knowledge between news and entertainment seekers in a high-choice media environment. However, not that many young adults seem to be using television to obtain news. As of 2006, Pasek, Kenski, Romer, and Jamieson found viewing of national or cable news ranked low, with one-quarter claiming to never watch that kind of programming. Thus we see a shift away from the type of viewing that increases trust and civic engagement.

Trust in government and knowledge of current events were not the only predictors of civic engagement to suffer as a result of increased television viewership. Pasek, Kenski,

Romer, and Jamieson found that the number of overall hours spent watching TV was negatively related to political participation. However, like Berman and Stookey (1980), they found that viewing choices had a mitigating effect. Those who went to the theatre to view movies demonstrated higher rates of civic participation than those who watched movies on television. They also found higher levels of civic participation among those who read books. Overall, though, Shah, Kwak, and Holbert (2001) found television to be a marginally significant negative predictor of contentment among young people.

Overall we see a decrease in civic engagement in relation to television viewing, despite the mediating factor of content preference. This leads to the question, is some other factor responsible for this disengagement from civic society? Deli Carpini (2004) holds that the decline in engagement can be attributed to increased trust in the private sector, a belief that becoming involved with political activities will not make a difference, due to the fact they have seen nothing else, and a lack of meaningful opportunities to become engaged. He also feels erosion of the civic infrastructure is also to blame. Young Americans are hurt by poor civic education during adolescence, a crucial time for the formation of civic habits. This view is also shared by Galston (2004).

Deli Carpini (2004) also cites a growing disconnect over important issues between the media and young adults as a cause of decline. Even though volunteerism is on the rise, he believes civic engagement has not increased because the work of participants is narrowly focused, not looking to society for wider solutions.

Along a similar vein, Rhan and Transue (1998) found the decline in engagement to be a result of a decline in social trust. However, unlike Putnam, the authors do not find a

relationship between the decline in trust in young adults and television viewing. They instead find that materialistic values are undermining young people's views about the trustworthiness of others to be eroding social trust. These findings held at both the individual and aggregate level. However, it should be noted that Zhang and Chia (2006) did not find trust in individuals or institutions to be a significant predictor of political participation.

We are thus left with an overall impression that a decline in trust is destroying civic engagement. However there appears to be more than one cause for the decline. Thus Putnam is only partially correct in his claim that television is destroying civic engagement. Multiple indicators of civic engagement were found to be in decline among young Americans, declines were seen in trust, consumption of daily news, and political participation. One possible explanation is found in the fact that Internet usage increased dramatically between 2000 and 2004. Could the Internet be causing a decline in various facets of civic engagement?

For purposes of this paper, increase in new media will be narrowed to mean increased Internet usage. This thus raises the question, what effect does the Internet have on civic engagement? Shah, Kwak, and Holbert (2001) looked at conditions under which Internet use is related to civic volunteerism, social trust, and life satisfaction, predictors of civic engagement. When the associations between overall Internet use and the criterion variables were analyzed, overall Internet use was found to be positively, but weakly, related to civic engagement and interpersonal trust. It was not related to contentment. Pasek, Kenski, Romer, and Jamieson (2006) found civic activity increased disproportionately in relation to Internet use. Political awareness and participation in voluntary associations were used as

indicators. In contrast, Uslaner (2004) found that overall general Internet use has no relation to trust.

However, different effects are seen when usage is broken down by type. People who used the Internet for social recreation, playing virtual video games, visiting a MUD (multi-user dungeon), or spending time in a chat room, had low levels of engagement in civic activities, trust in other people, and life contentment. Consumption users, who shop on-line and use the Internet as a financial and travel resource, were less likely to be content with their life. In contrast, those who used the Internet for information exchange, searching for information and exchanging e-mail, were found to have a positive impact on all three criterion variables. This is supported by the work of Eric Uslaner (2004), who found that those who use the Internet to check stock quotes and those who use email report slightly higher levels of trust. Similarly, young adults who use the Internet for information most days of the week were more likely to report regular participation in civic activities than those who never used new media Pasek, Kenski, Romer, and Jamieson (2006). Shah, Kwak, and Holbert (2001) believe this occurs because these individuals encounter more mobilizing information and experience more opportunities for recruitment in civic life. These effects were found to be strongest amongst younger adults.

Overall, these findings are similar to those concerning television; content preference has a mitigating effect on engagement according to Berman and Stookey (1980), Prior (2005) and Pasek, Kenski, Romer, and Jamieson (2006). This raises the question: Do young Americans view and use the Internet differently than older citizens? Younger and more educated people spent more time using the Internet according to Zhang and Chia (2006).

According to Deli Carpini (2000), those between the ages of 18 and 29 are significantly more likely to have access to the Internet and to go on-line. In addition, 70% of this age group saw the Internet as a useful source of political and issue information. In contrast only 48% of those over 25 held this view. Pasek, Kenski, Romer, and Jamieson (2006) found that using the Internet to get information was the most popular form of media use, with 58.3% of youth reporting that they do this most days of the week.

It is clear that the Internet is preferred by younger citizens. However, is there any truth to the claim that the Internet is preferred by hermits or anti-socials? Uslaner (2004) finds no support for the claim that those with strong social connections in the real world avoid the Internet or that the net is a haven for those who do not trust. As stated previously, those who check stock quotes and those who use email report slightly higher levels of trust. However, the overall finding is that general Internet use has no relation to trust. High-volume Internet users have wider social circles and support networks. Those who report high contact with family also report high use of e-mail. This suggests that the Internet is another outlet for those who already are connected to people. Furthermore, people who visit chat rooms or who make new friends online were found to be no more or less sociable than anyone else. They do not have bigger or smaller support networks and are not less likely to visit relatives or call friends. Yet, they are less trusting than others. It should be noted that, 60% of Internet users report no visits to chatrooms and amount of trust does not predict amount of time spent online.

This research tells us that Internet users on average are basically no different from the rest of society in terms of civic engagement. Interestingly, high-volume Internet users are

more engaged with social networks and we see this type of high-volume Internet usage among younger adults. These two findings suggest that young Americans may have swapped traditional forms of engagement for new ones. If this is true, it would not be unreasonable to assume that young adults are turning to non-traditional sources for news and political information. The mainstream media has recently become quite interested in the views expressed on internet journals, blogs, and the effect of these postings on public opinion. This raises the question, what impact do blogs have?

According to Cochran (2006), less than 10% of citizens read blogs frequently. However, one in five between the ages of 18 to 24 claim to read blogs frequently. Cochran notes that for most bloggers the goal is activism, not discussion. Ross and Griffiths (2006) find that blogging, while interesting to the media and academia, does little for the common citizen in the United Kingdom. This study looks at blogs of members of Parliament. It was found that for a small section of the population who normally would not be engaged, blogging brought about dialogue on current issues with politician.

Like much of the new media literature, the work on blogs is very new and incomplete. What we do know is the Internet does appear to have an effect on young Americans, especially those who are already engaged. The Internet is viewed as a good mechanism for obtaining information and its use is growing rapidly among adults. However more research must be done to gain a better understanding of the relationship between civic engagement and new media

In sum, studies of civic engagement conclude that a decline in trust is destroying civic engagement. Among young Americans, we find declines in trust, consumption of daily

news, turnout, and political participation. Preliminary work on new media and civic

engagement tells us that Internet users on average are basically no different from the rest of

society in terms of civic engagement. However, high volume Internet users are more

engaged with social networks and we see this type of high volume Internet usage among

younger adults. These two findings suggest that young Americans may have swapped

traditional forms of engagement for new ones.

Theory and Hypotheses

If young adults have merely abandoned traditional media - newspapers and network news - for Internet-based media, this is not to say that that young adults have fully disengaged from the political aspects of civic life, based on our understanding of previous research on the impact of media consumption on civic engagement. In fact, if Internet media is truly engaging young Americans with current events and political happenings, the 2008 presidential election may well see an increase in turnout among young adults. We have already seen this increase in the 2008 primary campaigns, particularly in the Iowa caucuses. It seems possible that this increase in turnout is being driven by increased levels of civic engagement tied to increases in Internet use.

Young adults have turned to online media to satisfy their informational needs for two reasons; the Internet has become deeply ingrained in the daily lives of young adults and mainstream media no longer covers the issues young adults see as important. There is no denying that the Internet has become a dominant force in the lives of young Americans. Everything is being done online: employment applications, banking, shopping, and most written communication. Also, the American higher education system has adopted the Internet into most of its everyday practices. Academic research often entails browsing through the library's electronic databases, classes are registered for via a web based platform and sometimes taken entirely online, assignments are often submitted electronically, and students no longer receive a paper bill for tuition, rather money is transferred into university coffers with a few clicks of the mouse. This widespread incorporation of Internet technology has left young adults with the understanding that the Internet is not only useful tool but also a

legitimate resource for information gathering. This is supported by Deli Carpini's (2000) finding that 70% of those 18 to 29 saw the Internet as a useful source of political and issue information.

In addition, young adults have turned to the Internet for information because they have become disenchanted with mainstream media. If one turns on the nightly network news a good third of the stories focus on geriatric health care concerns, prescription drug benefits and colon cancer screenings. These types of stories disengage young adults from the media. This is supported by scholar Michael X. Deli Carpini (2000), who found a growing disconnect between the issues seen as important by young adults and those seen as important by the mass media. Thus it is no surprise that young adults have turned to online media outlets where they can pick and choose the stories they attend to. This search for information will further foster civic engagement.

The Internet should increase levels of civic engagement among young citizens who use it regularly because it helps them to become informed about issues and events. The speed of the Internet allows citizens to find the information they need and desire quickly. In a few seconds a search engine such as Google can provide hundreds of links to sites related to the searcher's interest. Citizens who know specifically what they are looking for are aided greatly because search engines provide a multitude of tools for narrowing and refining one's search. The Internet is thus an excellent tool because it helps citizens to circumvent the problem of limited time and resources. The Internet should help to facilitate civic engagement because it provides an efficient way to access large amounts of information.

Civic engagement has both a mental and a physical component. Physical engagement includes activities such as: registering to vote, voting in federal, state, or local elections, and attending group meetings of a political or non-political nature. The Internet should help increase turnout by providing information on where and how to register to vote and information about polling places for Election Day. Mental engagement refers to citizens taking an active interest in issues related to their community, current events, or politics. It is important not only because it helps spur physical engagement by driving citizens to become actively engaged but also because it provides a filter through which citizens can sort and evaluate the massive amounts of information they are bombarded with daily. The Internet helps citizens to be mentally engaged by providing tools to keep tabs on a host of issues and concerns so they can become more actively engaged when they feel the situation warrants. In sum, I believe the Internet facilitates civic engagement by providing the information needed to make informed decisions for those who utilize these resources. I expect to find that those young citizens who spend measurable amounts of time online engaging in political information-seeking and discussion will exhibit higher levels of civic engagement.

Although voter turnout may be seen as one aspect of civic engagement, it can be argued that increased civic engagement can lead to greater levels of voter turnout. This may seem somewhat backwards, but when one looks at civic engagement in a larger sense, we see that in the end civic engagement is basically mobilization of the citizenry. But what good is mobilization if it has no tangible end? It is therefore rational to assume that citizens who have become engaged with and interested in issues and politics will seek a way to express their engagement. This is only natural seeing as these individuals have made sacrifices to

become engaged. While there are multiple ways to express one's engagement, voting is a rational choice because it is the way citizens are able to make a discernable change. In sum, it can be argued that efforts to increase engagement are basically efforts to increase voting. Based on the earlier discussions of civic engagement, I predict any increase in civic engagement for young citizens will lead to an increase in voter turnout among that group.

From this theory I can propose the following hypothesis.

Hypothesis 1: Young citizens who use the Internet to access news and political information will be more civically engaged than their peers.

Hypothesis 2: Young adults who prefer the Internet for gathering news and political information express more interest in voting in the 2008 presidential election. Because, as we have already discussed, increased civic engagement should lead to an increase in voting intention.

Data and Methods

To test these hypotheses I collected survey data in the late fall of 2007.[1] Participants

were 124 students enrolled in two different sections of Iowa State's Introduction to American

Government course. Students were contacted during the last week of the fall 2007 semester,

in early December. They were asked a variety of questions about their Internet use, media

preference, knowledge of computers and the Internet, political practices, and demographic

characteristics. Students under the age of 18 were excluded because obtaining parental

consent would have been nearly impossible. No reward to induce compliance was offered to

participants.

The participants in this study were relatively homogeneous. Of those who responded,

81.5% identified themselves as White –Non Hispanic. As for age, 88.2% of the sample

identified themselves as between the ages of 18 and 21. While years of education varied, all

participants fall into the benchmark category of some college.

The relevant dependent variables in this analysis were civic engagement and vote

intention for the 2008 presidential election. Civic engagement was the dependent variable

for testing hypothesis one, that young citizens who use the Internet to access news and

political information will be more civically engaged than their peers. Intention to vote in the

2008 presidential election was the dependent variable for hypothesis two, that young adults

who prefer the Internet for gathering news and political information express more interest in

voting in the 2008 presidential election.

Civic engagement was operationalized by asking participants about their physical and

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[1] For more information about this survey instrument, see Appendix A.

mental engagement. This operationalization was appropriate because it took into account the internal and external nature of engagement. Physical engagement was measured by asking participants if they had ever registered to vote, if they had ever voted in a federal, state, or local election, if they belonged to any political clubs or organizations, and if they belonged to any clubs or organizations with a non-political orientation. Mental engagement was measured by asking participants how interested they were in politics, and how interested they were in the news in general. These six questions were combined into two additive indexes. The scores for each question were weighted evenly, so that no one question disproportionately affected the overall score. This was done by turning the two engagement scores into percentages. Percentages were calculated by adding the individual question scores together and then dividing by the maximum possible score. These percentages were then multiplied by1/3 for mental engagement and 2/3 for physical engagement. These weights reflect the number of questions asked for the total measure. The two weighted percentages were then added to form an overall score. Low scores tell us that participants are less civically, while high scores indicate high engagement.

To measure use of online media for political deliberation, participants were asked how often they read on online journals to attain political information, how often they have watched video clips of a political nature on a Website such as Youtube, and how often they used a chat room or instant messaging to discuss politics or current events. The responses to these questions were combined into a simple additive index where low scores indicated little use of the Internet for political discussion and high scores indicated extensive use of online media to partake in deliberation. Participants were also asked from which source they most

often acquire information on current events and politics. This question was asked to determine if participants used online media to obtain news and political information. Two dummy variables were created for the analysis; one dummy for those individuals who used the Internet to attain information and another dummy for those who used other media outlets to attain information.

In addition, exposure to the Internet was measured by asking roughly how many hours were spent online each week, excluding email.   Connectedness to the Internet was measured by asking participants from where they most often accessed the Internet and if they owned a laptop computer. To gauge trust in online media respondents were asked if they felt that the Internet was a reliable source for political information. Finally, political efficacy was measured by asking respondents if they felt that people like themselves could affect the political process.

To measure the control variables of family income, gender, party ID, and social and economic ideology, participants were asked a series of self-report questions. Age and race were excluded due to the previously mentioned homogeneity of the sample.   Level of computer literacy was measured with a series of knowledge questions: "what is the keyboard command used to paste text into a word document?" "what the abbreviation http stands for?" and "which of the following is not a computer programming language?" Measuring computer literacy allows us to gain a better understanding of the extent to which young adults are familiar with computer basics. Participants were also asked if they grew up in Iowa to see if the political culture of the state has a socializing effect on its children. Iowans take great pride in their presidential caucuses.

Results

To test the hypothesis that young citizens who use the Internet to access news and political information will be more civically engaged than their peers, a block regression analysis was run. Block regressions allow for the efficient grouping of numerous independent variables. In my analysis, a block regression was most appropriate because the large number of independent variables which are more interesting when grouped in to relevant categories. I am interested in the overall effects of the Internet and not individual measures of Internet usage. This regression helps separate the variables that focus on the Internet and computers more generally from those that look at online media use.

The first block, Table one, was comprised of demographic factors, factors over which the participant had no control. These included gender, family household income, and whether or not one grew up in Iowa. The model explained less than one percent of the variance. Growing up in Iowa approached traditional levels of significance. The positive value for the coefficient tells us that those who grew up in Iowa are more likely to be civically engaged. This finding supports the previous suspicion that the caucus process likely has an engaging effect on its citizens. The next block, Table two, brought participants' social an economic ideology in to the analysis. Growing up in Iowa held its significance and no other variables reached significance. The model became no more effective in predicting civic engagement. The Adjusted R Square fell to -.001.

Table 1
Civic Engagement Model - OLS Block Regression of Demographic
Variables

Independent Variables	Unstandardized Coefficents	Std. Error
Demographics		
Gender	0.030	0.038
Income	-0.002	0.012
Grow up in Iowa	0.076*	0.042
Constant	0.565	0.079
R^2 (Adjusted)	0.009	
N	111	

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
Dependent Variable - Civic Engagement Index

Table 2
Civic Engagement Model - OLS Block Regression of Ideology

Independent Variables	Unstandardized Coeffients	Std. Error
Demographics		
Gender	0.032	0.038
Income	-0.002	0.012
Grow up in Iowa	0.074*	0.042
Ideology		
Economic stance	-0.025	0.026
Social stance	0.015	0.025
Constant	0.590	0.099
R^2 (Adjusted)	-0.001	
N	111	

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
Dependent Variable - Civic Engagement Index

At the third stage, reported in table three, party identification was added. Dummy

variables were created for Independents and Democrats. Republicans were the excluded

category because college students on average tend to lean more to the left. The model fit

rose to .070. The Independent dummy variable became statistically significant and the Democrat dummy variable approached traditional levels of significance. Both coefficients were negative which indicates that those who call themselves Independent or Democrat are less likely to be civically engaged than Republicans. This suggests that the Republican Party in Iowa is effectively connecting with its college-aged members.

Table 3
Civic Engagement Model - OLS Block Regression of Party Identification

Independent Variables	Unstandardized Coefficents	Std. Error
Demographics		
Gender	0.037	0.037
Income	-0.007	0.012
Grow up in Iowa	0.082*	0.041
Ideology		
Economic stance	-0.010	0.027
Social stance	0.038	0.026
*Party Identification**		
Democratic dummy	-0.103*	0.062
Independent dummy	-0.175***	0.056
Constant	0.566	0.097
R^2 (Adjusted)	0.070	
N	111	

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
Dependent Variable - Civic Engagement Index
* Note-Republicans Omitted Category

Participant efficacy and trust in the Internet were added to the model for block four, reported in table four. Efficacy refers to the extent to which an individual believes that they can have an effect on political outcomes. The two are similar because both require some level of trust. Individuals must trust that change can occur before they believe that they can

have an impact. However, adding these variables has little effect on the model. The model

fit dropped slightly to .059 and no other variables became significant.

Table 4
Civic Engagement Model - OLS Block Regression of Efficacy and
Trust

Independent Variables	Unstandardized Coefficents	Std. Error
Demographics		
Gender	0.038	0.037
Income	-0.007	0.012
Grow up in Iowa	0.077*	0.042
Ideology		
Economic stance	-0.009	0.027
Social stance	0.039	0.026
*Party Identification**		
Democratic dummy	-0.108*	0.063
Independent dummy	-0.180***	0.057
Efficacy and Trust		
Efficacy	0.020	0.029
Trust in the Internet	0.012	0.030
Constant	0.482	0.138
R^2 (Adjusted)	0.059	
N	111	

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
Dependent Variable - Civic Engagement Index
* Note-Republicans Omitted Category

The fifth stage, reported in table five, incorporated variables related to computers and

the Internet: number of hours spent online each week excluding e-mail, connectedness to the

Internet, and a measure of computer literacy. Including these variables resulted in an

increase in model fit to 9.9% of variance explained. At this stage all variables except

growing up in Iowa held their significance. However, more interesting was the effect of the

computer literacy score which was significant and positive which indicates that those who

know more about computers and Internet are more likely to be civically engaged.

Table 5
Civic Engagement Model - OLS Block Regression of Computer and
Internet usage

Independent Variables	Unstandardized Coefficents	Std. Error
Demographics		
Gender	0.051	0.039
Income	-0.004	0.012
Grow up in Iowa	0.056	0.043
Ideology		
Economic stance	-0.005	0.027
Social stance	0.033	0.026
*Party Identification**		
Democratic dummy	-0.111*	0.062
Independent dummy	-0.173***	0.057
Efficacy and Trust		
Efficacy	0.019	0.028
Trust in the Internet	0.019	0.029
Computers and Internet		
Net Connectedness	0.012	0.022
Hours online	-0.019	0.016
Computer literacy score	0.051**	0.020
Constant	0.482	0.138
R^2 (Adjusted)	0.099	
N	111	

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
Dependent Variable - Civic Engagement Index
* Note-Republicans Omitted Category

The final block of variables, reported in table six, had the greatest effect, with the

result of the adjusted R Square increasing to .130, explaining 13.0% of the variance. These

variables focused on media use. The online deliberation variable measured how often

participants used blogs, online chat, and online video clips to attain political or issue information. It showed a positive relationship that approached traditional levels of significance indicating that those young adults who used the Internet to discuss current events and politics were more likely to be civically engaged. Interestingly my dummy variables for media preference did not reach significance. This is important because it tells us that simply using the Internet to obtain news and political information does not lead to an increase in civic engagement.

Table 6
Civic Engagement Model - OLS Block Regression of Media use

Independent Variables	Unstandardized Coefficents	Std. Error
Demographics		
Gender	0.061	0.038
Income	-0.001	0.012
Grow up in Iowa	0.048	0.043
Ideology		
Economic stance	0.002	0.027
Social stance	0.024	0.026
Party Identification*		
Democratic dummy	-0.113*	0.062
Independent dummy	-0.165***	0.057
Efficacy and Trust		
Efficacy	0.009	0.029
Trust in the Internet	0.019	0.029
Computers and Internet		
Net Connectedness	0.014	0.022
Hours online	-0.022	0.016
Computer literacy score	0.055***	0.021

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
Dependent Variable - Civic Engagement Index
* Note-Republicans Omitted Category

Table 6 (continued)

Independent Variables	Unstandardized Coefficents	Std. Error
*Media Use****		
Online Deliberation	0.013*	0.008
Internet preference dummy	0.110	0.120
Traditional preference dummy	0.165	0.117
Constant	0.482	0.138
R^2 (Adjusted)	0.130	
N	111	

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
Dependent Variable - Civic Engagement Index
** Note- Do not follow current events omitted category

It again must be noted that many of the variables in the model could not help explain the variance in civic engagement. The demographic variables that never reached statistical significance were: gender and family household income. Growing up in Iowa was significant at first but then dropped out in block 5. Neither measure of ideology, social or economic, reached significance. Neither measure of trust, efficacy and trust in the Internet, was significant. Being literally more connected to the Internet had no effect. Most importantly, preferring the Internet for gaining political information had no effect on civic engagement. Many of these findings are surprising, given that many of the variables are traditional indicators of participation, especially efficacy and income. The possible reasons for these variables not reaching significance will be discussed in the following section.

To test the hypothesis that young adults who prefer the Internet for gathering news and political information express more interest in voting in the 2008 presidential election, a logistic regression was estimated. The dependent variable, intention to vote in the 2008

presidential election, was operationalized by asking participants if they planned to vote in

2008. Answers were coded with yes having the value 1 and no unsure being coded and 0.

The analysis included all the same media, Internet and computer, and demographic

independent variables used in the previous analysis except this time the civic engagement

index was added to the list. The model explained 50% of the variance and the model Chi

Square was significant at p<.001 level.

Looking more closely we see that none of the dummy variables for media preference

approached statistical significance. This tells us that simply using the Internet to obtain news

and political information has no relation to one's intention to vote in the 2009 presidential

election. However, other factors predicted vote intention.

The best predictor of intention to vote in 2008 was civic engagement. It reached

statistical significance with p < .001. A positive coefficient tells us that those who were

civically engaged were also more likely to express interest in voting in the next presidential

election.[2] This finding is important because it tells us that the relation between intention to

vote and civic engagement is strong.

Another interesting predictor of intention to vote in 2008 was online deliberation.

This relationship approached traditional levels of significance with p<.10. Surprisingly, the

relationship between the two was negative; suggesting that using the Internet to discuss

current events and news leads one to be less likely to vote in 2008.

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[2] I ran the logistic regression twice. The second time I left prior voting out of my engagement index to see if prior voting was driving civic engagement. This was not the case. Both prior voting and civic engagement were positive and statistically significant with p < .01. Thus, the civic engagement index is important above and beyond prior voting.

Growing up in Iowa was again significant. This relationship approached traditional levels of significance with p < .10. The coefficient was positive, telling us that those who grow up in Iowa are more likely to express interest in voting in 2008.

Last but not least, the Democrat dummy variable and gender both approached traditional levels of significance with p< .01. The relationship between being a Democrat and intention to vote in 2008 was positive, telling us that those who identify as Democrats are more likely to vote in 2008. As for gender, the negative relationship with intention to vote tells us that males are more likely than females to vote in the upcoming election.

Table 7
Intention to Vote in 2008 Model - Logistic Regression

Independent Variables	Log Ratios	Std. Error
Demographics		
Gender	-1.646*	0.951
Income	0.144	0.297
Grow up in Iowa	1.823*	1.110
Ideology		
Economic stance	-0.350	0.803
Social stance	0.498	0.607
*Party Identification**		
Democratic dummy	3.805*	2.151
Independent dummy	1.011	1.600
Efficacy and Trust		
Efficacy	1.057	0.692
Trust in the Internet	-0.727	0.847
Computers and Internet		
Net Connectedness	-0.033	0.514
Computer literacy score	-0.476	0.577

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
* Note-Republicans Omitted Category

Table 7 (continued)

Independent Variables	Log Ratios	Std. Error
*Media Use**		
Online Deliberation	-0.442*	0.259
Internet preference dummy	-0.382	2.860
Traditional preference dummy	-3.263	2.634
Engagement Index	13.997****	3.854
Constant	-1.438	4.385
Log Likelihood	-21.8567	
Pseudo R2	0.503	
N	111	

*p<.10,**p<.05,***p<.01,****p<.001;two-tailed
** Note-Do not follow current events omitted category

Again, it must be noted that many of the variables failed to attain statistical

significance. No relation was found for media preference. Neither measure of trust, efficacy

and trust in the Internet, were significant. No measure of familiarity with or use of Internet

and computers had an impact. Ideology and income were not significant in the model.

Discussion

The homogeneity of the samples makes the above analysis especially interesting because the observed differences can be attributed to differences in the relevant dependant variables, not traits and characteristics beyond the participant's control. This homogeneity is the reason that age and race were left out of the analysis. With little diversity in Iowa, the likelihood that race could have an effect is low. This is because minority populations are small and dispersed throughout the state and thus have not united over common issues. Looking at age we see that nearly 90% of the sample falls between the ages of 18 and 21. With a vast majority of the sample in such close proximity it is no surprise that age would have an effect, given that the population does not vary substantially.

Typically, those with higher incomes tend to be more involved with politics because they have greater resources at their disposal (Rosenstone & Hansen, 2003). These resources allow individuals to focus on more than just the basics of everyday life. In addition, those with higher incomes are more likely to give to political candidates and encounter the mobilizing effect of party. Interestingly, income does not have an effect on civic engagement. This is likely due to the fact that participants have roughly the same educational background. As noted by Verba, Brady, and Schlozman, (1995) education is important because it instills interest and the civic skills that facilitate participation.

The first variable to be significant in the blocked model is growing up in Iowa. Again, this relationship is positive suggesting that those who grew up in Iowa are more likely to be civically engaged. This makes sense given that Iowa is considered to have a moralistic political culture. According to Daniel Elazar (1994), moralistic states see service to the

community to be of utmost importance. This often results in amateur participation in politics. Knowing this it is not hard to imagine that children raised in Iowa would have a strong sense of civic duty which would lead them to value the activities that make for civic engagement. However, because this variable does not hold its significance throughout the model, the importance of growing up in Iowa to civic engagement is limited.

Ideology did not affect engagement. Again, this is likely due to the fact that Iowa is a relatively homogeneous state.   Without a broad array of groups and interests represented it is likely that the differences in social and economic ideology are not as diverse as one might think. This is supported by the finding that the mean scores, on a five-point Likert range, for social and economic ideology were 3.01 and 2.85, respectively. Both scores had a standard deviation of approximately 1, telling us that most of the population considered themselves to be moderate.

Looking at party identification, we see that the dummy variable for Independents is highly statistically significant, while the dummy variable for Democrats approaches traditional levels of significance. Both relationships are negative, telling us that those who identify as Democrat or Independent are less likely than those who identify as Republican to be civically engaged. Party ID, as understood by the authors of *The American Voter* (1960), is best described as a psychological attachment that endures even when a formal membership, a consistent voting record, or an active connection to a party does not. It therefore can be best described as an attitude. What about this attitude makes Independent and Democrat identifiers less civically engaged than Republican identifiers?   When the means for the three groups' mental and physical engagement are compared, we see that

Independents tend to be noticeably below average on mental and physical engagement.

Democrats are slightly less physically engaged but are slightly above average on mental

engagement. Similarly, Republicans are slightly above average on mental engagement and

significantly above average on physical engagement. Being the only group of the three to be

above average on this dimension supports my earlier assertion that Republican party is

effectively connecting with and mobilizing young citizens. It must be noted, this finding is

interesting given that Republicans often tend to be less involved and organized at the college

level.

Efficacy, the belief that one can have an impact on the political process, and trust in

the Internet were not found to be significant. This is interesting because scholars of civic

engagement, especially Putnam, find trust to be key predictors of civic engagement. I

believe that my finding that trust is not a predictor of engagement may be due to the fact that

Iowans in general are quite trusting, only 11% of the sample did not believe that they could

affect politics.

In the fifth block variables related to Internet and computer usage enter the model.

The only variable that is statistically significant is computer literacy. The positive

relationship tells us that participants with higher computer literacy scores are more likely to

be engaged civically. It must be noted that while I aimed to ask a diverse range of questions

regarding computers and the Internet, there is a plethora of information about the two and my

questions may not have allowed participant to express their knowledge fully. However, this

variable stayed highly significant throughout the model, highlighting a real connection

between literacy and engagement. It is not inherently clear why this connection exists but

two likely explanations exist. One's literacy score could be a reflection of an individual's desire to learn and become educated. While it is true that that all participants were enrolled in college at the time of the survey, not all students desire the same things. All college students desire an education of some kind but the quality and extent varies. Thus, it could be that computer literacy is high among those who desire to learn about a broad range of topics. If this is true then it is not hard to imagine that these students are also interested in politics, current events, and shaping the world around them. Looking in a different direction, civically engaged individuals might be high in computer literacy because they are utility maximizers who wish to find information as efficiently as possible. Thus, they know much about computers and the Internet because they want to maximize their limited resources. This finding warrants future investigation.

As stated previously, total hours spent online approached significance, with a negative relationship suggesting that spending significant hours online has a slight disengaging effect. This result coincides with Pasek, Kenski, Romer, and Jamieson's (2006) finding that political participation decreased as overall hours spent watching television increased. This suggests that civic engagement may decrease when individuals spend their limited resources, notably time, engaging in an activity that isolates the individual.

An individual's connectedness to the Internet, measured by ownership of a laptop and most common location used to access the Internet, does not affect civic engagement. This is not that surprising when we consider that college students have excellent access to the Internet. College campuses provide students with Wi-Fi and multiple computer labs. In addition, a vast majority, 82.3%, of the sample own laptop computers, telling us that

basically they have instant access to the Internet. In sum, we see no dramatically appreciable differences in the availability of Internet among college students.

The results that speak most directly to the hypothesis, young citizens who use the Internet to access news and political information will be more civically engaged than their peers, comes from the final block regression. Neither of the dummy variables for media preference became significant. This tells us that young citizens who prefer the Internet for attaining news and political information are no more likely to be engaged civically. Thus, there is no direct support for this hypothesis. However, interestingly we find that those who used the Internet to discuss current events and politics, online deliberation, reported higher levels of civic engagement. Individuals who report high levels of online deliberation frequently use blogs, chat, and online video clips to attain news and political information. This tells us that for young adults who are engaged, discussion of politics has, at least in part, shifted away from face to face deliberation in favor of online deliberation. Robert Putnam (1995) tells us that causal discussion and informal gatherings among the average American have decreased markedly, one quarter since 1965. Thus, it seems likely that the Internet has replaced the back porch as forum for discussion for interested and informed youth.

These findings support my theory that that those young citizens who spend measurable amounts of time online engaging in political information-seeking and discussion will exhibit higher levels of civic engagement. In sum, we see that young adults must be actively engaged in political deliberation and information gathering. Simply preferring the Internet to find news and political information is not enough to elicit higher levels of engagement.

It must be noted that the overall model fit was quite poor. Only 13.0% of the variance could be explained by the final model. This suggests that some other unknown variable is having an effect and is likely driving civic engagement in my sample.

There is little support for hypothesis two; young adults who prefer the Internet for gathering news and political information express more interest in voting in the 2008 presidential election. Neither of the dummy variables for media preference reached statistical significance. Interestingly, we see that online deliberation approaches traditional levels of significance with a negative relationship. This indicates that those who engage in greater amounts of online deliberation are less likely to express interest in voting in the next presidential election.

This finding is rather surprising. However, looking more closely we see that there is no direct correlation between online deliberation and intention to vote in 2008. The Pearson correlation coefficient is .004 (p=.63). This suggests that no relationship may actually exist. The results that are seen may in be a result of complex correlation procedures. However, if those who engage in greater amounts of deliberation are actually less inclined to vote; it may be because these individuals are content to leave their activism online. This was true of Howard Dean supporters in 2004. These supporters used the Internet to show their activism. They gave significantly to the campaign through secure online transactions. However, these online activists did not show up to caucus or vote for Dean in significant numbers (Abramson, et al. 2007). Overall, this finding is difficult to explain and is thus rather perplexing.

However, these findings are still relevant and interesting. What we see is that those who partake in more online deliberation of politics are more civically engaged and those who are more civically engaged express greater intention to vote in the 2008 election. Although there is not a direct causal link between deliberation and intention to vote, it seems that the two are not unrelated.

This finding lends support to my prediction that we will likely see increased turnout of young Americans in 2008 due to increased civic engagement. However, more importantly, my finding that civic engagement increases turnout tells us that young adults are capable of being mobilized. However, for this to occur politicians must speak about the issues young adults see as important. If these issues continue to be bypassed, young adults will remain relatively unengaged.

As noted previously, the beast predictor of intention to vote in 2008 was civic engagement. Finding that my measure of civic engagement is a good predictor of vote intention for the next election is important. This speaks directly to my theory that civic engagement drives turnout. It also suggests that the increased turnout seen among young adults in 2004 was likely due to increased engagement.

As noted above, we find efficacy and trust in the Internet not to be significant predictors of intention to vote. This finding that efficacy is not significant is surprising because we would expect that those who feel that they do not have an effect on the political process would express no interest in voting. Also, it is not surprising that there is no connection between connectedness to the Internet and vote intention. This can be attributed to the little variation seen in level of connectedness. However, of greater interest is the

finding that computer literacy score did not have an affect on intention to vote. This suggests that literacy only affects civic engagement.

Looking at party ID, we see that those who identify as Democrats are more likely, than Independents or Republicans, to express interest in voting in 2008. The relationship approaches traditional levels of significance. This result is interesting seeing as Democratic identifiers were less likely to be civically engaged. This result suggests that individuals can be mobilized without being truly civically engaged. Further, the finding that growing up in Iowa increases interest in voting again suggests to us that the caucus process likely has an engaging effect. As mentioned previously, growing up in Iowa did have a positive effect on overall civic engagement. This supports Elazar's conclusion that Iowa is a moralistic state that values civic participation and its ancillary, voting.

Gender also had an impact on the model. The relationship approaches traditional levels of significance. Because male was coded as one and female as two, the negative coefficient tells us that males are more likely to express interest in voting in 2008. This is interesting seeing as women typically turnout at higher rates than men; however this is mainly true due to the fact the high level of turnout among those older than 65 tends to be predominantly female. Thus, we should not see a gender gap for this age range.

Again we see that income and ideology have no effect on intention to vote. This again is best explained by the homogeneity of the sample. Because level of education, race, and age are held constant we see no significant difference for these variables.

Conclusion

Several caveats are in order. The most obvious problem with this research is its limited generalizability. Much might have been gained by being able to survey a random sample of those 18 to 29. My sample primarily looks at young adults in college and thus gives a fairly narrow view of young adults. I have surveyed only students enrolled in college, so I have no idea if the Internet and political new media are affecting those with less education. Surveying a more diverse sample would likely bring to light differences that result from varying levels of income and a racial makeup that more closely matches that of the country as a whole. I believe that the nature of my sample is suppressing important demographic differences.

As is apparent in many surveys, I believe self-report has led to respondents over-reporting their engagement. I feel this is especially pronounced for my measure of mental engagement. In fact, 80% of participants had a mental engagement score of .8 out of 1 or higher. While those with more education tend to be more interested in politics and current events, these findings do not look anything like a normal distribution. If participants were being truly honest, we would probably see many more students with a score around .5. Additionally, looking back I see that I should have also asked participants how frequently they watch or read about current events and political happenings. This would have given me a measure of behavior instead of just attitude.

Being enrolled in an Introduction to American Government course may have artificially increased student's estimation of engagement. This is because the class generally reminds students of the duties and roles of good citizens. Social psychology tells us that

most people report being above average. Thus it is no surprise that students enrolled in American government classes see themselves a better than average citizens.

Finally, It must be noted that intention and behavior are quite separate. Although the data tell us that 85% of all participants intend to vote in the next election, we know from the literature that less than half of these individuals actually will vote. A multistage survey would allow us to see what percentage of participants actually voted. Knowing this would provide the data need to talk about how civic engagement affects turnout, a much more interesting and relevant question.

Finally, I believe that some of my more unusual findings may be due to my sample size. Although, 124 is not considered small in statistical terms, it pales in comparison to the large surveys, 1,000 plus respondents, conducted by the Institute for Social Research. Additionally, a vast majority, 106 out of 124 respondents, expressed intention to vote in 2008. While intention and turnout naturally vary notably, I believe we are seeing much social desirability.

Previous research tells us that there is a connection between consuming different types of media use and civic engagement. My research tells us that that those who partake in greater amounts of online deliberation are more likely to be engaged civically. In addition, those individuals who are most informed about computers and the Internet are also more engaged civically. These findings partially support my theory that increased civic engagement is a result of young adults consuming political and issue information via the Internet. Similarly, my finding that high levels of civic engagement lead to increased

intention to vote in the 2008 presidential election supports my claim that increased turnout will be seen in the 2008 presidential election because of increased civic engagement.

Although I cannot directly prove that the 2008 presidential election will see an increase in turnout among young adults. I can say that this is a likely possibility due to my findings from the two analyses. The first analysis tells us that actively participating in online deliberation of news and political information lead to increased civic engagement, while the second analysis tells us that high levels of civic engagement lead to increased intention to vote in the 2008 presidential election.

Although my research tells us much, a better understanding of the relationship between the Internet, consumption of political and issue information, civic engagement, and turnout should be pursued. Some questions to examine include: What are the predictors of a high computer literacy score? To what extent are online activists engaged outside of the Internet? Did the Internet influence citizens who recently became civically engaged with politics? What factors lead individuals to act on their intentions to vote?

Appendix

New Media Survey Questions

1. At any point since coming of voting age, 18, have you registered to vote?
    A. Yes
    B. No

2. Have you ever voted in a federal, state, or local election?
    A. Yes
    B. No

3. Do you intend to vote in the 2008 presidential election?
    A. Yes
    B. No
    C. Undecided

4. How interested are you in politics?
    A. Very interested
    B. Somewhat interested
    C. Neither interested or uninterested
    D. Somewhat disinterested
    E. Very disinterested

5. How interested are you in the news in general?
    A. Very interested
    B. Somewhat interested
    C. Neither interested or uninterested
    D. Somewhat uninterested
    E. Very uninterested

6. Do you feel that people like you are able to affect the political process?
    A. Yes
    B. No
    C. Unsure

7. Do you belong to any political clubs or organizations?
    A. Yes
    B. No

8. Do you belong to any clubs or organizations with a non-political orientation, examples included a sorority or fraternity, The Red Cross, Habitat for Humanity, and Cyclone Alley?
    A. Yes
    B. No

9. How many hours do you spend online each week, not including e-mail?
   A. Less than 5
   B. 5 to 10
   C. 10 to 15
   D. 15 to 20
   E. More than 20

10. Do you currently own a laptop computer?
    A. Yes
    B. No

11. From where do you most often access the Internet?
    A. A computer lab
    B. A personal computer in a dorm or apartment
    C. A laptop computer

12. What is the keyboard command you would use to paste text in a word document?
    A. Ctrl v
    B. Ctrl p
    C. Alt p
    D. Insert

13. What does the abbreviation http stand for?
    A. hyper text transfer portal
    B. hyper text transformation protocol
    C. hyper text transfer protocol
    D. hyper text transformation portal

14. Which of the Following is NOT a programming language?
    A. Java
    B. C++
    C. Visual Basic
    D. NINO

15. How often have you read an online journal or blog to attain political information?
    A. Never
    B. Once or twice ever
    C. Once a month
    D. Once a week
    E. Once a day

16. How often have you watched a video clip of a political nature on a website such as Youtube?
    A. Never
    B. Once or twice ever
    C. Once a month
    D. Once a week
    E. Once a day

17. From which of the following sources do you most often acquire information about current events?
    A. Mainstream online news sources such as CNN.com or FoxNews.com
    B. Traditional television network news on ABC, NBC, and CBS.
    C. Nontraditional television programs such as The Daily Show with Jon Stewart and Anderson Cooper 360°
    D. Nontraditional online news sources such as NPR or Al Jazeera
    E. Newspaper or news magazine
    F. I do not follow current events.

18. How often have you used a chat room or instant messaging program to discuss politics or current events?
    A. Never
    B. Once or twice ever
    C. Once a month
    D. Once a week
    E. Once a day

19. Do you feel that the Internet is a reliable source for political information?
    A. Yes
    B. No
    C. Unsure

20. Did you grow up in the state of Iowa?
    A. Yes
    B. No

21. Thinking about economic issues, where do you consider yourself to stand on the liberal conservative continuum?
    A. Very Conservative
    B. Conservative
    C. Moderate
    D. Liberal
    E. Very Liberal

22. Thinking about social issues, where do you consider yourself to stand on the liberal conservative continuum?
    A. Very Conservative
    B. Conservative
    C. Moderate
    D. Liberal
    E. Very Liberal

23. Which of the following best describes your political affiliation?
    A. Republican
    B. Democrat
    C. Independent

24. What is your gender?
    A. Male
    B. Female

25. What is your age?
    A. 18
    B. 19
    C. 20
    D. 21
    E. 22 or older

26. Which of the following describes you best?
    A. White Non–Hispanic
    B. African American
    C. Hispanic
    D. Asian or Pacific Islander
    E. Other

27. What is the approximate annual income of your immediate family?
    A. Less than $30,000
    B. $30,000 to $59,999
    C. $60,000 to $89,999
    D. $90,000 to $119,999
    E. $120,000 to $149,999
    F. $150,000 and up

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