Social capital and social media: the effects of Facebook use on social capital and perceived community involvement

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SOCIAL CAPITAL AND SOCIAL MEDIA:
THE EFFECTS OF FACEBOOK USE ON SOCIAL CAPITAL
AND PERCEIVED COMMUNITY INVOLVEMENT

by

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SOCIAL CAPITAL AND SOCIAL MEDIA:
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ABSTRACT

The purpose of this paper is to look at the effect of social media use on social capital. This paper attempts to establish a dichotomy between ‘real’ and ‘perceived’ social capital and the effect of social media use on both. I use a survey instrument measuring both the social media use and ‘real’ social capital of one group compared with the social media use and ‘perceived’ social capital of the second group. I find that while social media use is related with survey respondents feeling more involved politically and in their community, there is no correlation between actual political/community involvement for other respondents.
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INTRODUCTION

In the research surrounding Social Capital there exists two starkly contrasting theories: One advanced most famously by Putnam’s *Bowling Alone* is that America is facing the death of the community and social capital (Putnam, 2000). This theory is contrasted by more modern studies that find new technologies, like computers and the networks they create, may foster social capital (Valenzuela et al., 2009). I argue that there need not be such a divide in theories and offer an alternative hypothesis: The advent of new technologies, specifically social media should be expected to make people feel more connected and involved both politically and socially, but it likely has no effect as either a boon or a hindrance when it comes to measurable political and community involvement as Putnam and Valenzuela argue. I believe social media will lack real and measurable effects.

DEFINING SOCIAL CAPITAL

Because I move from the traditional definition of social capital to one more focused on measurable statistics like community involvement through volunteerism and meeting attendance and voting, it is important to first understand the theory behind the commonly accepted definitions. With commonly accepted definitions in hand, I establish the connection between the idea of social capital and more tangible concepts of community and political engagement. Commonly accepted is the idea that greater levels of social capital
result in greater levels of community and civic engagement, because it is hard to create a tangible measure for social capital to compare with social media, I instead test the relationship between social media and the measurable variables that social capital is held to increase: political and community engagement.

With the previously mentioned strong grip on the theoretical definitions of social capital, it is important to create my own definition and better define the interaction of the internet and social media with the measurable changes that increased social capital can affect. The main model for this project, Robert Putnam, is not the first to define social capital. Putnam points to the first definition as that of L.J. Hanifan in 1916, who defined "social capital" as, "That in life which tends to make…tangible substances count for the most in the daily lives of a people, namely, good-will, fellowship, mutual sympathy and social intercourse among a group of individuals and families who make up a social unit" (Hanifan, 130). Hanifan provides a useful definition in that social capital is important because it makes tangible things count for more. Hanifan's definition also lays out an important basic framework for such an amorphous concept, of social capital as a communal thing that provides individual benefit.

However, the idea of social capital can be traced much further back than Hanifan's coined phrase. Tocqueville also concerned himself with the social condition of Americans in his collection of essays, *Democracy in America*. Tocqueville first notes that, "The social condition of American's is eminently democratic" (Tocqueville, 59). A culture based around
democracy is participatory in nature, and one that is likely to give rise to many institutions that promote civic involvement. Tocqueville also notes the uniquely American trend of forming associations, observing, "Americans of all ages, conditions, and all dispositions constantly unite together. Not only do they have commercial and industrial associations to which all belong but also a thousand other kinds" (Tocqueville, 596). Taken in combination with his assessment of America's uniquely democratic character it comes as no surprise that Tocqueville can be assessed to be an early purveyor of the idea of social capital. This social capital, if understood through the lens of Hanifan, is certainly best produced when Americans freely associate equally.

James Farr finds in his essay, "Social Capital: A Conceptual History" that the base of the definition of social capital can be found in 19th and early 20th century texts as I have already suggested. Farr points to the likes of John Dewey and Karl Marx as men who fostered the early definition of the term and especially helped to forge the term as it is now understood. Dewey was a prominent early 20th century philosopher who pushed for moving school from individualized learning styles to the socialization of learning (Farr, 17). The socialization of learning can help us understand the early idea that the socialization of most societal processes is beneficial. It seems Dewey rightly believed that greater levels of interaction and schools as a locus of community were important for the development of a strong citizenry. Dewey's thoughts on the idea of social capital
provide the novel idea that community is a thing that can be learned or gained, not something inherent in all Americans or society.

Farr also cites Marx's definition of "gesellschaftliche Kapital" (social capital) in his conceptual history. He notes that Marx terms it, "An aggregate or 'quantitative grouping' of individual capitals that formed a fund for further production" (Farr, 23). Marx's definition appears the furthest from other major historical thinkers thoughts on the concept. Farr argues that Marx seemed to think of social capital as something created by collectivized labor, a relatively narrow approach. However, this is not to discount Marx's point about the importance of labor. Unions, community businesses, and various organizations are certainly a key part of the development of strong intra-societal bondage, therefore providing an important contribution to definition of the term.

What then, can be taken from the historical speculation around social capital for the purposes of my work? It is clear that social capital requires some sort of collectivization in pursuit of betterment. Thinking simply in terms of the major historically cited definitions, social capital can be understood as the coming together of community, whether that be for democratic processes, in labor groups, or as neighbors. Furthermore, this ‘coming together’ results in accumulated benefits (the "capital" part). Understanding the basic definition of collected community benefits makes understanding the more nuanced definitions of modern social capital theorists much easier. Again, this more nuanced understanding is important for application in my own research, where I hope to
look at the effect of social media use on many variables that I term as part of social capital. Some of which (including volunteerism, for example) contribute directly to collected community benefits.

Perhaps the forbearer of the modern definition of social capital is Pierre Bourdieu, with his definition of the term in his essay titled "The Forms of Capital."

Pierre defines social capital as:

"The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group– which provides each of its members with the backing of the collectivity-owned capital, a 'credential' which entitles them to credit, in the various senses of the word" (Bourdieu).

Bourdieu's definition closely mirrors that which has been seen thus far, people gain a sort of collective power through their membership and maintenance of group bonds. However, Bourdieu falls short in his strict focus on "capital" in a conventional sense. He seems to argue that people establish and maintain social bonds to provide themselves with material gains. This sense of a concrete gain is furthered by his use of monetarily stylized language. Bourdieu zeros in on the idea of, "the network of relationships [as] the product of investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships that are directly usable in the short or long term" (Bourdieu). This is Bourdieu's biggest failing in an otherwise strong definition, the fixation with usability. He implies that social capital can be spent, and while it social capital can be spent in a manner, Bourdieu ignores the intrinsic benefits
that it provides, including a greater sense of connection, health, and happiness, which are all covered by later thinkers. However, he does make a well-taken point about ‘capital’ as it is something that is unquestionably measurable, to make my argument, I attempt to identify variables that hint at the intrinsic benefits social capital is associated with.

James Coleman notes the benefits of social capital that do not only include an increase in one’s material standing in his article, "Social Capital in the Creation of Human Capital." Coleman in the latter half of his paper presents an empirical study measuring the dropout rates of students across high school types: public, private, and private Catholic (Coleman). Coleman finds that Catholic schools have a markedly lower dropout rate than both normal private schools and public schools (Coleman, 115). Coleman argues this is because the Catholic school environment provides a strong interconnected web of social ties, forming a social capital rich group where the students benefit (Coleman, 114). Coleman’s study and definition provide important expansion from Bourdieu’s constrained views. The study proves that social connectedness and capital give benefits not only related to economic gain, but also to students success as learners and community members. Social capital for Coleman enhances many aspects of life beyond the gain of only physical capital, creating the most expansive definition yet. Thinking in terms of social networking and how it can be understood with the expanded definition, it is possible that a social network provides an enhanced web of connectedness much like Catholic school does in
Coleman's study. The goal of a social network is to provide a strong reinforcement web for social ties, much like a smaller private school environment cited by Coleman.

A better picture of the more comprehensive model of social capital can be found in Nan Lin's formal model from his article "Building a Network Theory of Social Capital." Lin's model is reproduced below (Lin, 41):

Fig 1.

Lin's theory eases understanding of a complex idea through a three stage process, where people first work to accrue social capital, then maintain, access, and use social capital to ultimately receive either "instrumental" or "expressive" returns (Lin, 39-40). Thinking forwardly to social media's interaction with this model, the ability of networking sites to increase both accessibility and the ability to mobilize one's social capital could prove interesting. Furthermore, while Lin's model is not novel for its parts, it is novel in its simplistic sum, allowing us to think
about how one's social assets can be converted to something accessed and then capitalized upon in the social media realm.

Finally in my research into key definitions of social capital I turn to Putnam's work in *Bowling Alone*. I have already discussed some of Putnam's findings, but for the sake of consistency and usefulness I also look at his definition for social capital specifically as it extends to the idea of "bonding" and "bridging." Putnam identifies social capital as referring, "To connections among individuals--social networks and the norms of reciprocity and trustworthiness that arise from them" (Putnam, 19). This simple and elegant definition proves especially useful simply because it is easy to understand yet relatively comprehensive. Putnam also creates a division in the social capital between "bonding" and "bridging." Bonding social capital is exclusive in its nature, the type that forms and creates tightly held close networks. Bridging social capital is inclusive, creating broader social connections and establishing networks between groups or individuals (Putnam, 22-23). Putnam's definitions make clear that it could be interesting to see whether social networks encourage the formation of social capital at all: do social networks create inclusive communities that encourage further involvement, do they establish new connections and new networks, or do they have little effect beyond the self-contained network they create as I posit? My quantitative research delves into this question.

Beyond his holdings on social capital, Putnam focused on its deterioration, much of it in his opinion, due to the advent of new technologies like TV. Putnam
argues that, “A major effect of television’s arrival was the reduction of participation in social, recreational, and community activities among people of all ages. Television privatizes leisure time” (Putnam, 236). This is a damning indictment of technology and modernization, and leaves the reader to wonder how the internet would factor into Putnam’s assessments. The internet has the ability to connect, but it also holds the ability to privatize leisure time more than ever before. Internet users do not sit around the family room computer browsing together like they would when watching TV, the internet and computer use are inherently individual activities. However, the internet does offer the social networks which I study, and these social networks purport to connect individuals while strengthening existent connections. Putnam wonders, “Will the internet become predominantly a means of active, social communication or a means of passive, private entertainment?” (Putnam, 179). The internet was still deep in its infancy when Putnam speculated about the future, and for that reason it is important to move past both his definitions and fears and to create my own definition and review more current literature.

**DEFINITION IN HAND: RESEARCH ON SOCIAL MEDIA’S INTERACTION WITH SOCIAL CAPITAL**

Both historical and modern definitions of the amorphous term "social capital" provide a necessary base for creating a working definition of the term for the purposes of this paper. I define "social capital" as the connections people
make, and how they use those connections to enhance themselves or their community standing. With this definition in hand we can turn to the literature covering social media's interaction with the previously murky concept of social capital. The research popping up around social media is still in its early stages, but it is both thought provoking and provides many interesting questions.

Facebook is easily the most widely used social network site in the current age. Sebastián Valenzuela, Namsu Park, Kerk F. Kee in their article, "Is There Social Capital in a Social Network Site?: Facebook use and College Students' Life Satisfaction, Trust, and Participation" explore the simple idea of the relationship between Facebook use and college students' social capital. The authors posit two hypotheses: That the intensity of Facebook use is positively associated with life satisfaction, and that the intensity of Facebook use is positively associated with social trust (Valenzuela et. al). Valenzuela and his co-authors attempt to measure social capital directly with their study, while I try to measure community and political engagement is linked back to greater amounts of social capital. The authors conclude that:

"Given the cross-sectional nature of this study, we cannot conclude that there is a causal relationship between using Facebook and increased social capital. It may well be that happy, trusting, civically and politically engaged students are more likely to join Facebook. The analysis of the profile of Facebook users suggests that those who are more civically oriented choose to join the online network in a disproportionate fashion" (Valenzuela et. al).

While they don't claim conclusive findings, the strong correlation between Facebook and social capital assuages Putnam's previously stated fears that the
internet could prove similar to television. However, the study is limited to a sample of Texas college students, and was done when Facebook was just beginning, and much different than it is today. For example, when Facebook was first started, it was limited to only college students connecting with other students at their own college. What this means is that when Facebook started, it lacked a lot of the expanded features and only reinforced existing collegiate connections. It is also possible that there was a selection effect created by early Facebook adopters who adopted Facebook with the potential of the site to further their capital in mind. Furthermore, as I previously stated, the authors of this study attempt to measure social capital directly whereas I care more about more tangible measures. Therefore, extending the authors' results to my own should be done with some reservation.

Ellison, Steinfield, and Lampe published a similar work to Valenzuela et. al in their article, "Connection Strategies: Social Capital Implications of Facebook-Enabled Communications Practices" the article investigated the connection strategies of Facebook users, providing more answers on the nature of social capital created by Facebook. Ellison et. all find that Facebook serves as "social lubricant" that encourages individuals to strengthen their weak ties and to send out requests for community support and action (873). Furthermore, the authors also find that Facebook is a good way to enhance latent or weak social ties, and can be used to learn about and gain a connection to one’s community (887). Social networking sites like Facebook seemingly increase the ability to establish
Putnam's bonding capital. Returning to my original speculation on the internet's effects on social capital, Facebook's ability to enforce connections is a strong positive force in the accumulation of social capital.

Finally, Ellison, Steinfield, and Lampe also published work entitled "The Benefits of Facebook 'Friends' Social Capital and College Students Use of Social Network Sites" arguing that Facebook only weakly enforced bridging social capital (Ellison et. all). The authors suggest that, "Interestingly, general Internet use was not a significant predictor of bridging social capital, suggesting that only certain kinds of uses of the Internet support the generation and maintenance of bridging social capital" (Ellison et. all). This provokes speculation that perhaps Facebook use, specifically certain kinds of engaged Facebook use like groups and events allow for students to create and upkeep bridging social capital, but that the main purpose of Facebook and the internet is more in the creation of "bonding" capital than "bridging."

Therefore, it seems a holistic view of the literature indicates that the Internet can have positive effects on social capital. However, Facebook and other social networking sites are still in their infancy and the research surrounding them is not without criticism. One author, Nie argues that the connections between internet use and sociability are weak, saying: "Internet users compared to nonusers report greater sociability and interconnectivity primarily because they are more educated, wealthier, and younger—not because they are Internet
users” (Nie, 428). This is an interesting point, and with the modern ubiquity of the internet, worth re-visitation.

Clearly there exists further room for further study of the interaction of social networking and the many factors contributing to social capital: does social networking encourage action, involvement, or community participation? Or does it have no measurable effect? My study focuses on whether social media use affects social capital in such a way that it can be measured in community and political involvement. I care more about whether people are involved and active as a result of social media. I do not study the direct affects of social media making users happier or more trusting. My focus is on the components of social capital that affect the whole of society – ultimately the experiment focuses on the betterment of society as a result of social capital.

EXPERIMENTAL DESIGN

My goal in creating the survey experiment was to test for two distinct involvement sets, which I termed “real” involvement and “perceived” involvement. The theory behind my choice was the idea that social media use would have no effect in contributing to real or measurable involvement, but that social media use does lead people to feel like they’ve done more. The classic example of this is ‘liking’ a candidate or cause on Facebook. Take a look at the “Kony 2012” movement, where tens of millions of people watched and shared a short documentary film via social media in an effort to stop the warlord Joseph Kony
via social media (Kron). While the rate of the video’s spread across various social networks was alarming, after the initial low cost sharing of a Youtube link, very little was actually done. Kony is a microcosm of what I believe to be widespread, low cost participation via social media, which I think makes people feel much more involved. I also argue, that like the Kony campaign, after the initial feeling of involvement, people are no more likely to go out and actually involve themselves in a cause.

In order to drive at my theory of perceived versus real involvement, I created Asking “real” involvement questions allowed for comparisons with existing research looking at social media’s measurable effects on social capital. The addition of “perceived” involvement questions was where I expanded on the existing research, looking to show that people might experience greater feelings of involvement associated with social media use.

I designed this experiment for use with Amazon’s Mechanical Turk human intelligence software via Qualtrics’ online survey Mechanism. Mechanical Turk workers complete ‘Human Intelligence Tasks’ such as surveys offered via programs like Qualtrics. Mechanical Turk is both cost effective and has been found to be “more demographically diverse than standard Internet samples and significantly more diverse than typical American college samples” (Buhrmester, 4). Using the Mechanical Turk software I put in place a survey that garnered 668 total responses.
All survey takers received basic demographic questions about age, race, education, income and so forth. Randomly selected survey takers received questions measuring community involvement, political involvement, and trust from Harvard’s short form Social Capital Community Survey. The other half of the randomly divided takers received questions measuring their feelings of involvement. All takers also received my own added questions asking about internet and social media usage. Again, there was a random division creating two groups of takers who received either questions asking them how they perceived their involvement in their communities or instead they received questions from the same short form Social Capital Community Survey measuring actual levels of involvement and social capital. The goal of this division was two fold: first, I did not want to prime survey takers by asking them questions measuring their involvement levels and then following with questions asking them how they perceived themselves to be involved. I did this because I did not want takers to think about their previous answers about how active they were in their communities when asking questions about how involved they felt. The second goal of the randomized division was to get at my key measure, social capital, “perceived” and “real” in its most measurable form: community and political involvement, while side-stepping my previously mentioned fear of priming the responses. Questions measuring “real” involvement asked respondents how many times in the past year they had volunteered, worked on community
projects, and attended public meetings among other measures. Questions measuring respondents’ “perceived” involvement included various feeling thermometers asking survey takers to rate their feelings of both community involvement and political activity. To end the survey the respondents faced final questions about internet usage with a focus on social media sites. These questions included the amount of time spent using their preferred social media, the amount of ‘connections’ each user had, and questions measuring how heavy the usage was (measuring if the users took advantage of the sites many interactive features). The survey also asks whether users believed that their favorite site increased “[their] sense of connection to [their] friends and community.” Again, the goal of creating the distinction between actual and perceived involvement via the randomization of two sets of questions.

RESULTS OF THE SURVEY EXPERIMENT

Following the implementation of my survey I received data for 678 records. Mechanical turk returns results that skew slightly younger, more male, and liberal than the general population. With limited resources, Mturk undoubtedly provides a more accurate sample than a sample of my own college peers. Furthermore, Buhrmester et. all found “MTurk participants were more demographically diverse than standard internet samples and significantly more diverse than typical American college samples” (Buhrmester et. all, 2011).

\[1\] For a full list of questions used see the entire survey, copied in the appendix.
Finally, Berinsky, Huber and Lenz in their paper conclude that, “the MTurk sample does not perfectly match the demographic and attitudinal characteristics of the U.S. population but does not present a wildly distorted view of the U.S. population either” (Berinsky et. all, 361). With these studies in hand, I feel safe arguing that the diversity of the dataset used is more than qualified enough to provide insight into political/community involvement and internet use.

In total the survey received 678 responses, copied below is a table reporting some key summary statistics:

<table>
<thead>
<tr>
<th>Women (45.3%)</th>
<th>Men (54.7%)</th>
<th>Voters (88.1%)</th>
<th>Non voters (11.9%)</th>
<th>Conservatives (22.4%)</th>
<th>Independents (29.4%)</th>
<th>Democrats (48.2%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>307</td>
<td>371</td>
<td>597</td>
<td>81</td>
<td>152</td>
<td>199</td>
<td>326</td>
</tr>
<tr>
<td>154 Age 15-24 (22.7%)</td>
<td>303 Age 25-34 (44.5%)</td>
<td>115 Age 35-44 (17%)</td>
<td>65 Age 45-54 (9.6%)</td>
<td>32 Age 55-64 (4.7%)</td>
<td>6 Age 65+ (.9%)</td>
<td>3 Less than High School (.05%)</td>
</tr>
</tbody>
</table>

The summary statistics show that on the whole the population skews slightly more male, younger, and educated than the general population.

Of the most interest to me was my comparison of social media usage against my two dependent variables: perceived involvement and actual involvement. First, I looked at how the group who received questions from the Harvard Social Capital Community Survey (HSCCS) reported their use of social media and if there was a significant relationship between their involvement and
use of social media. I used many different measures of involvement from the HSCCS to measure actual involvement. These variables include whether or not the respondent volunteered for a community project, donated blood, attended a public meeting, went to a political meeting, attended a club meeting, if they considered themselves a community leader, and the amount of times they volunteered in the past year. This measure acted as the dependent variable for my regression.

The main independent variable for my regression model was a composite score for social media use. This variable was composed of a score that took into account how heavily respondents used features like Facebook events, groups, chats, and statuses; it also included their number of connections and how heavily they used their preferred social media platform. When regressing the involvement additive against the independent social media additive, no significant relationship was present between how involved a person was politically and in their community and how heavily they used social media for the bivariate regression. This is shown in figure 2, copied below. As the figure shows, social media use does not have a significant effect on the likelihood of voting. Things like intensive get out the vote strategies focused on social media should have no real effect, as high social media users are no more likely to vote than social media users. Even when controlling for age, as young people are more likely to use social media and to vote less, there is no effect. For the most fundamental indicator of political involvement, voting, it appears that there is no relationship
between heavy social use and an increased likelihood of taking part in the
democratic process.

**Voting and Social Media Use**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>voter</td>
<td>0.005</td>
<td>0.007</td>
<td>0.013</td>
</tr>
<tr>
<td>social media use</td>
<td>(0.34)</td>
<td>(0.48)</td>
<td>(0.97)</td>
</tr>
<tr>
<td>education</td>
<td>0.038</td>
<td>0.035</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.62)**</td>
<td>(4.23)**</td>
<td></td>
</tr>
<tr>
<td>age</td>
<td></td>
<td></td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2.35)*</td>
</tr>
<tr>
<td>Constant</td>
<td>1.884</td>
<td>1.725</td>
<td>1.649</td>
</tr>
<tr>
<td></td>
<td>(152.03)**</td>
<td>(47.21)**</td>
<td>(34.05)**</td>
</tr>
<tr>
<td>Observations</td>
<td>671</td>
<td>671</td>
<td>671</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.00</td>
<td>0.03</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Absolute value of t statistics in parentheses
* significant at 5%; ** significant at 1%

Fig 2.

Across all regressions there is no relationship between a higher social
media score and the measure for voting, a benchmark for political involvement.
The t-statistic consistently remains below one and fails to have shows that at
best there is a very small, but unvalidated relationship between social media and
voting. The education and age controls serve to help validate the quality of the
sample by controlling for indicators of social media use that may lead to a biased
estimate. It is important to control for age as social media is a newer technology
popular among a much younger set, and it is also important to control for
education as sites like Facebook were originally introduced at the collegiate level.
Still, even when controlling for education and age, the variable measuring social
media use is far from having any significant effect. Further validating the quality
of my results, education and age have the expected relationship with voting indicating that the lack of a relationship between the level of social media use and voting can be trusted.

Another key measurable indicator of social capital is volunteerism, which is indicative of community involvement. Copied below is a table reproducing the same measure as used above for social media use, regressed against rates of volunteerism.

### Volunteerism and Social Media Use

<table>
<thead>
<tr>
<th></th>
<th>(1) volunteered</th>
<th>(2) volunteered</th>
<th>(3) volunteered</th>
</tr>
</thead>
<tbody>
<tr>
<td>social media use</td>
<td>0.090 (0.94)</td>
<td>0.092 (0.96)</td>
<td>0.100 (1.03)</td>
</tr>
<tr>
<td>education</td>
<td>0.064 (1.17)</td>
<td>0.061 (1.11)</td>
<td></td>
</tr>
<tr>
<td>age</td>
<td></td>
<td></td>
<td>0.044 (0.55)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.959 (11.49)**</td>
<td>0.683 (2.72)**</td>
<td>0.548 (1.56)</td>
</tr>
<tr>
<td>Observations</td>
<td>330</td>
<td>330</td>
<td>330</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.00</td>
<td>0.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Absolute value of t statistics in parentheses
* significant at 5%; ** significant at 1%

As is shown above, the level of social media use has no statistically significant effect on the volunteer variable, which I use as a proxy measure for social capital. This further confirms my hypothesis that use of social media has no real effect on the amount of involvement people have in both their communities and politically. However, when introducing controls, there is also no strong correlation between volunteerism and education or age, which may be a result of what is not
expected to be as strong of a relationship as age/education and voting, and also possibly a result of the smaller sample size.

To confirm that the null finding was not a fluke, I also regressed the social media score variable with the measure for public meeting attendance. Copied below are my results:

**Public Meeting Attendance and Social Media Use**

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>social media use</td>
<td>0.055</td>
<td>0.056</td>
<td>0.067</td>
</tr>
<tr>
<td></td>
<td>(1.86)</td>
<td>(1.89)</td>
<td>(2.26)*</td>
</tr>
<tr>
<td>education</td>
<td>0.026</td>
<td>0.022</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.52)</td>
<td>(1.29)</td>
<td></td>
</tr>
<tr>
<td>age</td>
<td></td>
<td></td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2.53)*</td>
</tr>
<tr>
<td>Constant</td>
<td>0.336</td>
<td>0.224</td>
<td>0.033</td>
</tr>
<tr>
<td></td>
<td>(12.98)**</td>
<td>(2.88)**</td>
<td>(0.31)</td>
</tr>
<tr>
<td>Observations</td>
<td>332</td>
<td>332</td>
<td>332</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.01</td>
<td>0.02</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Absolute value of t statistics in parentheses
* significant at 5%; ** significant at 1%

Fig. 4

When introducing controls for age and education, social media use is significant at the p<.05 level, and hovers just below significance otherwise. Public meeting attendance also correlates increasingly with age, as is expected. It appears there is some affect when controlling for age and education. This can be explained by considering that increasing social media use, especially with Facebook means having a very easily usable tool for event reminders, so it is not all together surprising that there should be a positive correlation between the two. However, when looked at in the context of all provided regressions, the overall effect of
social media use seems fairly negligible, as I predicted. Social media use may have very minor effects community involvement, and no real effect for the key markings of political involvement.

It is also important to note, that unlike TV for Putnam and unlike the doomsayers’ predictions, social media use does not appear to be correlated with drop offs in participation either. When regressed against social media use, my ‘real’ involvement measures have very limited affects, providing support to my alternative hypothesis that social media is neither the great connector, or another force destroying America’s civic community.

Next, I turned to my own designed questions measuring people’s perceived involvement looking to see if there was significant interaction between perceived involvement and social media use. My hypothesis is that heavy social media use might be related to greater feelings of involvement politically and in their community. To measure how involved people perceived themselves to be, I asked respondents to evaluate two statements on a 0-10 scale, if they:

1. “Feel like [they] are a politically active individual”
2. “Feel like [they] are involved in their community”

Copied below is the table measuring the regression for the feeling of community activity with social media score:

<table>
<thead>
<tr>
<th>Feeling of Community Involvement and Social Media Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Feeling</td>
</tr>
<tr>
<td>social media</td>
</tr>
<tr>
<td>0.358</td>
</tr>
<tr>
<td>(2.35)*</td>
</tr>
</tbody>
</table>
education          0.371   0.367  
             (3.97)** (3.84)**  
age                  0.026  
                    (0.21)  
Constant            3.507   1.954  1.885  
         (24.65)** (4.71)** (3.57)**  
Observations            333   333   333  
R-squared              0.02   0.06   0.06  

Absolute value of t statistics in parentheses
* significant at 5%; ** significant at 1%

Fig. 5

This finding is important in comparison to the non-significant finding for actual political and community involvement because showing that people who use more social media are more likely to feel more involved in their community while a similar sample shows that more social media use doesn’t actually correlate to greater involvement that would justify this feeling of greater involvement. Across the board there exists a relationship between greater social media use and the feeling of community involvement. This is very interesting because it implies that people are joining groups on Facebook or LinkedIn, ‘liking’ a page on Facebook, or tweeting about a cause and feeling like they are involved with their community. Furthermore, this low cost form of participation does not translate to much engagement in the real world, as I discussed earlier when I showed the lack of relationship between social media and political and community involvement. This regression lends credence to my hypothesis that while social media has not lead to greater involvement, it may certainly have some influence in making people feel as if they are more involved.
As I found no relationship between political involvement and social media use, it was also important to regress the feeling of political involvement with social media use. Copied below is a table of regressions for the feeling of political involvement compared with social media use:

<table>
<thead>
<tr>
<th></th>
<th>(1) Feeling</th>
<th>(2) Feeling</th>
<th>(3) Feeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social media use</td>
<td>0.259</td>
<td>0.282</td>
<td>0.320</td>
</tr>
<tr>
<td></td>
<td>(1.55)</td>
<td>(1.73)</td>
<td>(1.89)</td>
</tr>
<tr>
<td>education</td>
<td>0.396</td>
<td>0.377</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.88)**</td>
<td>(3.62)**</td>
<td></td>
</tr>
<tr>
<td>age</td>
<td></td>
<td></td>
<td>0.117</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.87)</td>
</tr>
<tr>
<td>Constant</td>
<td>3.906</td>
<td>2.250</td>
<td>1.940</td>
</tr>
<tr>
<td></td>
<td>(25.15)**</td>
<td>(4.96)**</td>
<td>(3.36)**</td>
</tr>
<tr>
<td>Observations</td>
<td>333</td>
<td>333</td>
<td>333</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.01</td>
<td>0.05</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Absolute value of t statistics in parentheses significant at 5%; ** significant at 1%

Fig. 6

Considering I expected strong positive effects from social media use on feelings of political involvement, there is a p<.05 one tailed effect for social media use on that feeling of political involvement. It is interesting to consider that heavy use of a social media site, be it ‘liking’ a candidates’ page, or joining a group of similarly
minded political individuals could have an effect on how a person feels involved politically.

Finally, I created an additive composite of the two feeling variables to see if I could isolate any effects. The goal of the creation of an additive variable was to increase the weight of those who felt both more involved in their community and politically, while simultaneously creating a stronger base of those who felt both less involved in their communities and with politics. Copied below are the results:

**Additive Measure for Involvement and Social Media Use**

<table>
<thead>
<tr>
<th></th>
<th>(1) feeling additive</th>
<th>(2) feeling additive</th>
<th>(3) feeling additive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Media Use</td>
<td>0.616 (2.20)*</td>
<td>0.661 (2.43)*</td>
<td>0.708 (2.51)*</td>
</tr>
<tr>
<td>education</td>
<td>0.767 (4.51)**</td>
<td>0.744</td>
<td>(4.28)**</td>
</tr>
<tr>
<td>age</td>
<td></td>
<td>0.143 (0.64)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>7.413 (28.40)**</td>
<td>4.204 (5.56)**</td>
<td>3.825 (3.98)**</td>
</tr>
<tr>
<td>Observations</td>
<td>333</td>
<td>333</td>
<td>333</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.01</td>
<td>0.07</td>
<td>0.07</td>
</tr>
</tbody>
</table>

Absolute value of t statistics in parentheses
* significant at 5%; ** significant at 1%

Fig. 7
The additive measure provides the strongest support for my hypothesis, those who feel more involved both politically and in their community have a statistically significant likelihood to use social media more heavily. This implication agrees with my hypothesis that people may not be more involved because they use social media more, but they are more likely to feel like they are doing more.

**DISCUSSION**

With Putnam’s *Bowling Alone* bringing the fear of the death of American society at the hands of technology to the forefront of Americans minds, it is important to update the work for the advent of new technologies. This survey serves as an attempt to update Putnam’s work for the internet age. Importantly, my findings imply that people are more and more likely to feel like they are doing more, when they really are not. Actual involvement appears mostly stagnant. At least some part of this, I argue, should be attributed to the more time they spend using social media. Still, because real involvement shows no positive or negative correlation with social media use, I don’t think there is cause to worry that social media use is further contributing to the deterioration of social capital.

Undoubtedly future research will need to explore the connection between social media and social capital further. Perhaps social media really does have an effect on dampening involvement it is important to measure to what extent and if there are differences between users’ preferred platforms. Furthermore, it is
possible that my findings showing social media increasing a sense of involvement could be a good thing – people could be using these sites to form real and tangible connections and get involved in other ways that my survey fails to pick up. With the rapid evolution of social networking sites and the ever-expanding capabilities of the internet, this is certainly a possibility.

The evidence I present implies that the more time people spend on social media, whether it be ‘liking’ candidate pages or causes, joining a community or political ‘group’, or even posting statuses advocating for causes gives them the same type of feeling a more tangible involvement might. I also show that this same greater use of social media has no meaningful effect on people going out and taking part in more real world activities. Essentially, it indicates that people are more than happy to ‘like’ something on Facebook or some other social media site without feeling the need to actually go out and take part in the cause for which they have displayed support.
APPENDIX – SURVEY EXPERIMENT

Are you: Male or Female?
1 = M
2 = F

*1 We’d like to ask you some questions about how you view other people, groups and institutions.
Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?
Feeling thermometer 1-7
1 = People can be trusted
4 = Unsure
7 = You can’t be too careful when dealing with people

*2 Next, we’d like to know how much you trust different groups of people. First, think about (GROUP). Generally speaking, would you say that you can trust them a lot, some, only a little, or not at all?

*2A People in your neighborhood
1 = Trust them a lot
4 = Trust them some
7 = I do not trust them at all

2B The police in your local community (would you say that you can trust them a lot, some, only a little, or not at all?)
1 = Trust them a lot
4 = Trust them some
7 = I do not trust them at all

2C People who work in the stores where you shop
1 = Trust them a lot
4 = Trust them some
7 = I do not trust them at all

*2D (How about) White people? <TRWHT>
1 = Trust them a lot
4 = Trust them some
7 = I do not trust them at all

*2E (How about) African Americans or Blacks? <TRBLK>
1 = Trust them a lot
4 = Trust them some
7 = I do not trust them at all

*2F (How about) Hispanics or Latinos? <TRHISP>
1 = Trust them a lot
4 = Trust them some
7 = I do not trust them at all

3 How interested are you in politics and national affairs? Are you very interested, somewhat interested, only slightly interested, or not at all interested?
1 = Very Interested
4 = Somewhat Interested
7 = Not at all interested

*4 Are you currently registered to vote
1 = Yes
2 = No
3 = Not eligible to vote

5A How much of the time do you think you can trust the NATIONAL government to do what is right – just about always, most of the time, only some of the time, or never?
1 = All of the time
4 = Some of the time
7 = Never

5B How about your LOCAL government? How much of the time do you think you can trust the LOCAL government to do what is right? (Would you say just about always, most of the time, only some of the time, or hardly ever?)
1 = All of the time
4 = Some of the time
7 = Never

5C Thinking POLITICALLY AND SOCIALLY, how would you describe your own general outlook--as being very conservative, moderately conservative, middle-of-the-road, moderately liberal or very liberal?
1 = Very Conservative
4 = Moderate
7 = Very Liberal

Now I’m going to ask you how many times you’ve done certain things in the past 12 months, if at all. For all of these, I want you just to give me your best guess, and don’t worry that you might be off a little. About how many times in the past 12 months have you (ACTIVITY):

6A (How many times in the past twelve months have you) **Worked on a community project**?
Slider = 0-50

6B (How many times in the past twelve months have you) **Donated blood**?
Slider = 0-50

*6C (How many times in the past twelve months have you) **Attended any public meeting in which there was discussion of town or school affairs**?
Slider = 0-50
6D (How many times in the past twelve months have you) **Attended a political meeting or rally?**
Slider = 0-50

*6E (How many times in the past twelve months have you) **Attended any club or organizational meeting** (not including meetings for work)?
Slider = 0-50

*6F (How many times in the past twelve months have you) **had friends over to your home?**
Slider = 0-50

*6G (How many times in the past twelve months have you) **been in the home of a friend of a different race or had them in your home?**
Slider = 0-50

*6H (How many times in the past twelve months have you) **been in the home of someone of a different neighborhood or had them in your home?**
Slider = 0-50

*6I (How many times in the past twelve months have you) **been in the home of someone you consider to be a community leader or had one in your home?**
Slider = 0-50

*6J (How many times in the past twelve months have you) **volunteered?**
Slider = 0-50

7 In the past twelve months, have you served as an officer or served on a committee of any local club or organization?
1 = Yes
2 = No
3 = Do not know

*8 Not including weddings and funerals, how often do you attend religious services?
1 = Every week or more
2 = A few times a month
3 = Once a month
4 = A few times a year
5 = Once a year
6 = Never
7 = Unsure

9 People and families contribute money, property or other assets for a wide variety of charitable purposes. During the past 12 months, approximately how much money did you and the other family members in your household contribute to all secular causes and all religious causes, including your local religious congregation
1 None
2  Less than $100  
3  $100 to less than $500  
4  $500 to less than $1000  
5  $1000 to less than $5000  
6  More than $5000  
7  Don't know  

*10 All things considered, how happy would you say you are?  
1 = Extremely Happy  
4 = Neutral  
7 = Extremely Unhappy  

*11 And how would you describe your overall state of health these days? Would you say it is excellent, very good, good, fair, or poor?  
1 = Excellent  
4 = OK  
7 = Very Poor  

12 Please tell me for the following statement whether you agree strongly, agree somewhat, disagree somewhat, or disagree strongly. Television is my primary form of entertainment  
1 = Agree Strongly  
4 = Unsure  
7 = Disagree Strongly  

*13 Our last questions are used to ensure that our sample for this survey accurately reflects the population as a whole. First, we'd like to know if you are working now, temporarily laid off, or if you are unemployed, retired, permanently disabled, a homemaker, a student, or what?  
1  Working  
2  Temporarily laid off  
3  Unemployed  
4  Retired  
5  Permanently Disabled  
6  Homemaker  
7  Student  

*14 Next, in what year were you born?  
<BYEAR> VALID RANGE 1910-1995  

*15 What is the highest grade of school or year of college you have completed?  
1  Less than high school (Grade 11 or less)  
2  High school diploma (including GED)  
3  Some college  
4  Assoc. degree (2 year) or specialized technical training  
5  Bachelor's degree  
6  Some graduate training  
7  Graduate or professional degree
*16  Do you consider yourself Hispanic or Latino?
  1  Yes
  2  No

*16A (IF YES) Would you say your background is Mexican, Puerto Rican, Cuban, or something else? <HISPANAT>
  1  = Mexican
  2  = Puerto Rican
  3  = Cuban
  4  = Other

*16B (IF NO ON 16) Do you consider yourself to be White or Black? <HISPRACE>
  1  White
  2  Black
  3  Other

*17  (IF NO ON 16) Do you consider yourself to be White, Black or African American, Asian or Pacific Islander, Native American, or some other race?
  1  White
  2  African American or Black
  3  Asian or Pacific Islander
  4  Alaskan Native/Native American
  5  Other
  6  Don't know
  7  Refused

*17A (IF 4 ON 17)  Would you say your background is Chinese, Korean, Japanese, Filipino, or something else?
  1  Chinese
  2  Korean
  3  Japanese
  4  Filipino
  5  Asian Indian
  6  Vietnamese
  7  Cambodian
  8  Other

*18  Are you an American citizen?
  1  Yes
  2  No

*19  How many different telephone numbers does your household have, not counting those dedicated to a fax machine or computer?
    <PHONES> VALID RANGE 1-9

19A  Do you have internet access in your home?
  1  Yes
2 No

*20A If you added together the yearly incomes, before taxes, of all the members of your household for last year, 2012, would the total be: (READ LIST)
1 Less than $30,000 or
2 $30,000 or more

*20B Would that be: (IF 1 ON 20A)
1 $20,000 or less
2 Over $20,000 but less than $30,000

*20C Would that be: (IF 2 ON 20A)
1 $30,000 but less than $50,000
2 $50,000 but less than $75,000
3 $75,000 but less than $100,000
4 $100,000 or more

21 And what city or town do you live in?
PROVIDE FILL IN FOR CITY AND STATE

22 Are you currently married, separated, divorced, widowed, or have you never married?
1 Currently married
2 Separated
3 Divorced
4 Widowed
5 Never Married

23 How many children, aged 17 or younger, live in your household?
Valid range 0-20

*24 Do you or your family own the place where you are living now, or do you rent?
1 Own
2 Rent

**Randomize who gets each section, half of survey gets “Perceived Involvement” other half gets regular questions 6 and 7.

Now I’m going to ask you about yourself. For all of these, I want you just to give me how you feel:

6A: On a scale from 1 to 7, 1 being strongly agree, 4 being neutral, and 7 being strongly agree, Please tell me for the following statement whether you: “Feel like you are a politically active individual”
1 = Strongly Agree
4 = Neutral
7 = Strongly Disagree
6B: On a scale from 1 to 7, 1 being strongly agree, 4 being neutral, and 7 being strongly agree, please tell me for the following statement whether you: “Feel like you are involved in your community”
1 = Strongly Agree
4 = Neutral
7 = Strongly Disagree

7: Do you feel like you are a leader in your community?
1 = Yes
2 = No

**(PICK BACK UP ON QUESTION 8))

SOCIAL MEDIA PORTION

Now I am going to ask a few questions about your internet usage. For all of these, I want you just to give me your best guess, and don’t worry that you might be off a little.

What is your preferred form of social media?
1. Facebook
2. Twitter
3. Google Plus
4. MySpace
5. LinkedIn
6. Other

How much time per day do you spend using your preferred form of social media?
1. <15 Minutes,
2. 15-30 Minutes,
3. 30-60 Minutes,
4. 60-120 Minutes
5. 120+ Minutes (POSSIBLE SLIDER BAR?)

On your preferred form of social media, how many friends, followers, or connections do you have?
1. <50
2. 50-100
3. 100-300
4. 300-600
5. 600+ Friends

My use of social media increases my sense of connection to my friends and my community
1 (Strongly Agree)
4 (Neutral)
7 (Do not agree at all)
What percentage of your friends, followers, or connections do you interact with outside of your social media connection (For example: Via phone, email, in person) weekly?
1. <1%
2. 1-5%
3. 6-15%
4. 16-30%
5. 31-50%
6. 50%+

Do you use Facebook?
1. Yes
2. No

(IF 1 ON PREVIOUS QUESTION) Now I am curious about how you use Facebook. On a scale from 1 to 7, 1 being strongly agree and 7 being strongly disagree, please evaluate the following statements:

I organize events via Facebook
1 (Strongly Agree)
4 (Neutral)
7 (Do not agree at all)

I participate in Facebook groups
1 (Strongly Agree)
4 (Neutral)
7 (Do not agree at all)

I use Facebook to chat with my friends
1 (Strongly Agree)
4 (Neutral)
7 (Do not agree at all)

I use Facebook to upload pictures and post status updates
1 (Strongly Agree)
4 (Neutral)
7 (Do not agree at all)

Facebook increases my sense of connection to my friends and community
1 (Strongly Agree)
4 (Neutral)
7 (Do not agree at all)
WORKS CITED


