

Social Media Usage: Barriers and Predictors in Promotion of Social Capital

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The concept of social capital is quite complex and every scholar defined it differently. Taking into consideration the idea of social capital discussed by Robert Putnam, James Coleman, Michael Woolcock, etc. the current study has determined the variables affecting the social capital. These variables are demographics (social network, education level and income) and psychographics (trust and empathy). Social capital in the current study is considered the combination of 'connectedness' and 'civic engagement'. 'Connectedness' include all the factors related to social media such as adoption of social media for civic engagement, early adoption of social media and frequency of using social media tools. 'Civic engagement' was measured in form of intensity, nature and frequency. To have more clarity of the research, association of demographics and psychographics with adoption of social media was determined. The study examined the association between early adoption of social media and frequency of civic engagement to know whether connectedness and civic engagement are linked to each other.

Keywords: Social capital, social media, civic engagement and volunteerism

Social capital in this study was considered the combination of 'connectedness' and 'civic engagement'. The main focus of the research was to determine the role of social media for civic engagement by volunteers. Various factors were covered under 'Connectedness' and 'civic engagement'. 'connectedness' include all the factors related to social media because social media is a major platform to stay connected to each other. These factors include adoption of social media for civic engagement, early adoption of social media and frequency of using social media tools.

'Civic engagement' was measured in form of intensity, nature and frequency. Intensity of civic engagement was analysed by using two different scales. The first scale concentrates on using features of social media demanding less and more efforts of the users. The second scale is called the process scale. It focused on the process to start a civic movement. Then, 'nature' of civic engagement was also determined such as issue-based, personality-based and event-based. 'Issue-based' civic engagement happens when a volunteer participate in voluntary activities because he/she is concerned about the particular problem. 'Personality-based' means participating in a civic activity because one likes the person who is handling the civic cause. 'Event-based' civic participation happens when a civic cause becomes an event and popularity of the event motivates people to join the cause. For instance many people are against the 'rape' but 'Delhi gang rape' in 2012 in India have enraged people all over the country and people participated in the cause for the justice.

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The study has also determined the factors affecting connectedness and civic engagement. These factors were demographics and psychographics of the respondents. Demographics include social network, household monthly income and education level. Psychographics contain trust and empathy. Further, the relation between demographics, psychographics and adoption of social media for civic engagement was also determined.

Literature Review

The concentration of the research was to understand the concept of social capital and find out the association between demographics and psychographics of the volunteers and social media usage. Previous researchers have different views regarding the variables affecting the social media usage for civic engagement and the concept of social capital. For the clarity of the concepts, literature review section is divided into two sub-sections; social capital and demographics and social media usage.

Social Capital

The concept of social capital is quite complex. Every researcher has a different point of view regarding social capital and factors affecting social capital. Many researchers have worked on this topic but few works have become popular such as of Robert Putnam, James Coleman, Michael Woolcock and Alejandro Portes. It is important to discuss the concept of every scholar one by one. Robert Putnam (2000) has discussed the concept of social capital in his book 'bowling alone'. His main focus was on United States and he analysed that why social capital in America declined very fast. He defined social capital as networks and associated norms of reciprocity. Putnam has operationally defined the measure of social capital such as: social networks (informal and formal), level of social trust and frequency of voting and volunteering.

In this research, level of trust was measured by using trust scale and frequency of volunteering in form of frequency of civic engagement. The study has also measured the level of social network i.e low or high. Two forms of the social networks were determined such as informal and formal network of the volunteers. Frequency of volunteering was measured as frequency of civic engagement (weekdays, weekends and during projects).

James Coleman (2015) said that social capital includes 'relation' between actors. The researcher in this study considered social capital as a resource because people can share the information with each other. Another form of social capital is where individuals do not expect help from each other. This kind of social capital only works on the basis of 'trust' when a person is certain that his help will be repaid in future. This study has covered various aspects of social capital to some extent. For instance level of trust was measured by using a scale. Further association between adoption of social media for civic engagement and trust was also determined. This was to ensure whether trust increases the chances to use social media for civic engagement.

Coleman also said that high level of education, voluntary society membership and charitable giving are associated with high levels of social capital. This is the reason that the current study has determined the association between education level and adoption of social media for civic engagement. Charitable giving was included in intensity of civic engagement scale.

Michael Woolcock and Deepa Narayan (2000) in their research paper defined social capital such as social ties/contacts, norms and networks of people to act collectively, type

of social system, goodwill, etc. According to researchers 'trust' and 'reciprocity' are important features of social capital. Researchers have defined two types of social capital; bonding and bridging. These both have different outcomes. Strong community relations are called 'bonding' social capital and weak intra community ties as 'bridging' social capital. When it comes to social network, the concept is already discussed above. This research has analyzed the association between goodwill and adoption of social media civic engagement. Goodwill was covered in 'empathy' scale.

Alejandro Portes (1998) in his research discussed the origins and applications of social capital. He said that social capital is in the structure of their relationships. One source of social capital is 'bounded solidarity'. For instance if workers are thrown in an emergency situation, they will support and identify each other's initiatives. 'Trust' is also one source of social capital. Through social capital actors can gain direct access to economic resources (subsidized loans, investment tips, protected markets), he defined economic capital is saved in people's bank account.

This study has covered the concept economic social capital by determining the association between income and adoption of social media for civic engagement. The concept of social network and trust was already discussed above.

Demographics, Psychographics and Social Media Usage

Many previous studies have discussed the association between demographics, psychographics and social media usage. The present study assumed that social network and adoption of social media for civic engagement are associated. Many previous researchers had also determined the association between civic participation and social network. For instance Bosancianu, Powell & Bratovi  (2013) hypothesized that low level of bridging networks prevent individuals to be part of civil society organizations. Researchers found no relationship between offline social capital and offline prosocial behavior. It means that if people have more contacts offline (bonding and bridging), it will not contribute in raising the level of offline civic participation.

Similarly Bryant, Slaughter, Kang, & Tax (2003) hypothesized that low social network decreases the probability of volunteering but their results revealed that people having wide networks in the community (high formal social network) volunteer most. Even Smith, D. H. (1996) found that informal social relations are positively correlated to civic participation. Then Zungia & Valenzuela (2010) found that weak- tie discussion (discussion with visitors, friends of friends and strangers) increases the likelihood of civic participation and it has emerged as the stronger predictor of civic involvement. This did not happen with the individuals having strong contacts with their close friends and family members.

Another research conducted by Paik, A. & Jackson, N. L. (2010) revealed that stronger bridging social capital result in more voluntary opportunities. All types of networks such as religious involvement, associational ties, and social tie diversity are significantly associated with volunteering. Selbee, K. L. & Reed, B. P. (2000) also found that large social circle is positively related to volunteering. On the other hand, respondents having only friends and family members in the social circle resulted in low level of volunteering.

The second demographic variable for the current study was 'education level'. The assumption says that education level and adoption of social media for civic engagement are associated. Many previous researchers such as Bergman (2005) also found that education level affects the status of online volunteering because people having high education level are using internet frequently for community issues. Then Paik, A. and

Jackson, N. L. (*ibid*) also found that high level of education leads to civic participation. Similarly, Barber, Mueller, and Ogata (2013) said that students those have completed more education participated frequently in civic activities. Bekkers, R. (2011) also found that people of high education level have high level of trust and thus high level of volunteering. Smith, D. H. (*ibid*) said that high civic participators are more educated than low participators.

The current study also assumed the association between household monthly income and adoption of social media for civic engagement. The idea came from previous researchers such as Bosancianu, Powell and Bratovic (*ibid*) found that limited finance is a major deterrent in volunteering. Hooper and Stobart (2003) said that households having high income can easily access internet and also donate to charities. Warburton, Paynter and Petriwskyj (2007) said that major barriers in volunteering are financial costs particularly with people earning less money.

After demographics, the present study also determined the association between psychographics (empathy and trust) and adoption of social media for civic engagement. Large literature was found regarding this assumption such as Brunell, Tumblin and Buelow (2014) found association between empathy and volunteering. Their research revealed that more empathic people participated frequently in voluntary activities. The reason might be that they suffer pain while seeing others suffering and thus help them to get rid of sadness.

Some researchers also analyzed whether internet usage reduces the trust level. Such as Uslaner, M. E. (n.d.) determined the association between trust and internet usage. Analysis revealed that internet usage does not reduce the level of trust among users, no worries what they do online. Bekkers, R. (*ibid*) conducted the study to know whether volunteering promotes trust or not. Results revealed that volunteering promotes trust and people those trust others are more likely to participate in voluntary organizations.

Theoretical Perspective

The idea to measure the social capital of the individuals for this study came into light from social capital theory proposed by Robert Putnam. He said that social capital has three components; moral obligations and norms, social values such as trust and 'social networks of citizens' activity, especially voluntary associations.

Putnam described two types of social networks; 'bridging' and 'bonding'. He suggested that the social capital derived from bridging, weak- tie networks is better for linkage to external assets and for information diffusion. This theory also argues that social capital is built on the effect of various contacts and regular interactions of groups of people who stand in rather loose contact to each other. Putnam said that informal connections generally do not build civic skills in the ways that involvement in a club, a political group, a union, or church but informal connections are very important in sustaining social networks.

The study has also measured social network in two forms: formal and informal. Formal social network contains family members, close friends, etc. Informal social network consists of people at work place, acquaintances, and friends of friends. Further, the association of informal and formal social network with adoption of social media for civic engagement was measured. The results revealed that respondents having low informal and formal social network use social media most for civic engagement than respondents of high social network. These results contradict 'social capital theory'. The level of 'trust' in the current was measured by using trust scale.

Social capital theory was also opposed by Structural Hole Theory. Ronald R. Burt (1997) is the main contributor of Structural Hole Theory. He said that loose networks are good source of opportunities and provide important information rather than closed network. Ronald said that social capital is created by a network of strongly interconnected elements while structural hole describe social capital as a function of brokerage opportunities. Burt in his paper compared two theories and claimed that according to structural hole weaker connections between groups are holes in the structure of the market. These holes create competitive advantages which further help individuals to attain goal. Linking structural hole with the current study, it can be said that informal social network results in more usage of social media for civic engagement than formal social network. Analysis revealed that respondents of both low informal and formal social network were equally using social media for civic engagement than respondents having larger informal social network. Thus, the point raised by Burt also proved false.

Methodology

The type of data collected is primary data obtained from volunteers. Sample of 300 volunteers were collected from tri-city: Chandigarh, Panckhula and Mohali in Haryana state of India. The list of 268 NGOs headquartered in Chandigarh, Panchkula and Mohali was obtained from various government departments such as 'Ministry of Women and Child Development (Panjab)', National Bank for Agriculture and Rural Development (NABARD), Chandigarh Social Welfare Board, Department of Health and Family Welfare, Society for Service to Voluntary Agencies (SOSOVA), North and Social Welfare Department of Chandigarh, Website of Planning Commission of India (<http://ngo.india.gov.in/>), Website of Chandigarh State Aids Control Society (<http://www.chandigarhsacs.org/FFExclusiveTI.html>) and Website of District Administration, Panchkula (http://panchkula.nic.in/list_ngo.asp). The list of these NGOs remained helpful in finding active volunteers for the research because contact numbers of volunteers associated with these NGOs were obtained.

Data Collection

The data collection tool is a questionnaire comprising of both open ended and close ended questions as well as scales. The scales were used to measure the psychographic profiling. These are ready available scales such as trust scale derived from the research paper written by Yamagishi, T. (1986). Empathy was also measured by using 'Toronto Empathy Scale' derived from a research paper written by Spreng, N., McKinnon, Mar,R., & and Levine, B. (2009). In other instances such as intensity of civic engagement, the scale was prepared as per the terms of the study.

To measure the intensity of civic engagement two different scales were prepared. The first scale concentrated more on the usage of social media features demanding more and less efforts from a volunteer. In this scale with every step, intensity of efforts increases. The second scale actually explains the process of civic engagement that how a volunteer start a civic movement, adopt different ways to promote the civic cause. These efforts get increased with every activity to make a civic cause successful. Second scale is also called the 'process scale'. Second scale was adapted from Flanagan, C.A., Syvertsen, A.K., and Stout, M.D. (2007). At last, frequency of online civic engagement was determined in terms of minutes. It has three categories; time spent on social media usage for civic engagement on a weekday, weekend and during projects.

Sampling Design: 300 volunteers were interviewed individually. These volunteers were selected from Chandigarh, Panchkula and Mohali using the method of non- probability sampling such as Judgment and Snowball Sampling.

Data Analysis: The research design selected for the study is qualitative and quantitative analysis. The collected data was analyzed for associations and correlations. Chi-square and Gamma test was used for the statistical analysis of the data. The data was analyzed by using SPSS.

Hypotheses

- H_{a1}: Early adopters have high frequency of civic engagement
- H_{a2}: Demographics and adoption of social media for civic engagement is associated.
- H_{a3}: Psychographics and adoption of social media for civic engagement is associated.

Results and Discussion

Connectedness

Connectednesses include all the factors related to social media because social media is a major platform to stay connected to each other. These factors include adoption of social media for civic engagement, early adoption of social media and frequency of using social media tools. The research starts with defining the usage of social media tools in general and not for civic engagement. Before discussing the first hypothesis, frequency of different social media tools for general usage is discussed in Table 1.

Table 1. Frequency of social media tools in general

| Social media tools | Less than 5 times in a week | b/w 6 to10 times in a week | b/w 11 to15 times in a week | 15 above in a week | Total |
|-------------------------|-----------------------------|----------------------------|-----------------------------|--------------------|-------|
| Social networking sites | 42 | 43 | 23 | 170 | 278 |
| Blog | 120 | 26 | 6 | 10 | 162 |
| Email | 90 | 87 | 39 | 61 | 277 |
| Media sharing sites | 74 | 67 | 60 | 67 | 268 |
| Micro blog | 102 | 17 | 4 | 6 | 129 |
| Discussion forum | 91 | 37 | 18 | 11 | 157 |
| Website | 75 | 58 | 82 | 48 | 262 |
| Social wikis | 55 | 65 | 73 | 75 | 268 |
| RSS feeds | 72 | 18 | 4 | 9 | 103 |
| Messaging services | 17 | 16 | 20 | 220 | 273 |

b/w : between

Table 1 demonstrates the results regarding the frequency of social media tools on weekly basis. Respondents were given four options to define their social media usage on weekly basis such as less than 5 times in a week, between 6 to 10 times in a week, between 11 to 15 times in a week and above 15 times in a week. Simple frequency method was used to determine the frequency of social media tools for general usage and not for civic engagement. When it is about the overall usage of social media tools, results proved that majority of volunteers (278) were using social networking sites most and RSS feeds the least. Data

regarding the social media tools on weekly basis revealed that majority of volunteers (220) used ‘messaging services’ more than 15 times in a week. ‘Microblog’ reported the lowest frequency because only 6 volunteers used this tool 15 times in a week. After discussing the frequency of social media tools, Table 2 defines the results regarding the first hypothesis. The first hypothesis says that early adopters have high frequency of civic engagement.

The association between early adoption of social media and frequency of civic engagement is important to know. It is believed that early adopters of social media are more familiar with the technology and different features of social media. So, when they are more familiar with social media they end up using it most for civic engagement. Frequency of civic engagement is determined on weekends, weekdays and during projects. The study assumed that early adopters have high frequency of civic engagement during weekends rather than on weekdays, because of plenty of free time on weekends. While doing survey some respondents mentioned that they only use social media for civic engagement when some project is started. So, a third category is kept for volunteers those use social media only during projects. Such volunteers are actually considered the ‘guest/rare users’ of social media for civic engagement. Results regarding the association between early adoption of social media and frequency of civic engagement in detail are demonstrated in Table 2. Chi-square was used to determine the association between early adoption of social media and frequency of civic engagement (weekday, weekend and during projects).

Table 2. Crosstab between early adoption of social media and frequency of civic engagement

| Frequency of civic engagement on a weekday | Early adoption of social media and frequency of civic engagement (weekday) | | | | Total |
|--|--|---------------|----------------|--------------|-------|
| | <20 minutes | 20-60 minutes | 60-120 minutes | >120 minutes | |
| Early adopter | 7 | 19 | 9 | 7 | 42 |
| Late adopter | 21 | 78 | 22 | 14 | 135 |

| Frequency of civic engagement on a weekend | Early adoption of social media and frequency of civic engagement (weekend) | | | | Total |
|--|--|---------------|----------------|--------------|-------|
| | <20 minutes | 20-60 minutes | 60-120 minutes | >120 minutes | |
| Early adopter | 3 | 17 | 11 | 10 | 41 |
| Late adopter | 15 | 61 | 40 | 20 | 136 |

Early adoption of social media and frequency of civic engagement (during projects)

| Frequency of civic engagement during projects | 20-60 minutes | 60-120 minutes | >120 minutes | Total |
|---|---------------|----------------|--------------|-------|
| | | | | |
| Early adopter | 1 | 8 | 10 | 19 |
| Late adopter | 3 | 27 | 48 | 78 |

Chi-square has given p value =0.476 for the cross tabulation between early adoption and frequency of civic engagement on a weekend. It means that there is no association between both variables because p value = 0.476 is greater 0.05. Analysis between early adoption of

social media and frequency of civic engagement on weekdays shows that p value=0.508. So, again p value is greater than 0.05 which proved no association between two variables. When it is about the comparison between weekends and weekdays, Table 2 given above clearly shows the increase of only one early adopter on weekdays.

Chi-square was again used to determine the association between early adoption of social media and frequency of civic engagement during projects. It gave p value =0.508 for frequency of civic engagement during projects. It means that there is no association between two variables. So, overall H_{a1} is rejected.

Civic Engagement

Civic engagement was measured in form of intensity, nature and frequency. Intensity of civic engagement was analysed by using two different scales. Nature of civic engagement contains three categories such as issue-based, personality-based and event-based. Frequency of online civic engagement was determined in three different categories such as time spent on social media usage for civic engagement on a weekday, weekend and during projects. This section covers the second and third hypotheses. Second hypothesis is regarding the association between demographics and adoption of social media for civic engagement. Third hypothesis determines the association between psychographics and adoption of social media for civic engagement. Before discussing the second and third hypothesis intensity and nature of civic engagement is explained in Table 3.

Table 3. Intensity and nature of civic engagement

| | Low intensity | Medium intensity | High intensity | Total |
|---|---------------|------------------|----------------|-------|
| Intensity of civic engagement (first scale) | 1 | 187 | 87 | 275 |
| Intensity of civic engagement (process scale) | 2 | 181 | 92 | 275 |

Nature of civic engagement

| Personality-based civic engagement | Event-based civic engagement | Issue-based civic engagement | Total |
|------------------------------------|------------------------------|------------------------------|-------|
| 13 | 29 | 223 | 275 |

Table 3 extensively defines the volunteers scoring on intensity of civic engagement scale and participating according to the nature of civic engagement. Simple frequency method revealed that maximum volunteers had medium intensity of civic engagement both in the first and second scale. When it is about the nature of civic engagement majority of volunteers (233) were participating in issue-based civic engagement and few (13) followed the personalities for civic participation.

Demographics as a Predictor for Adoption of Social Media for Civic Engagement

This section discusses the association between demographic variables and adoption of social media for civic engagement. Three demographics were selected for the present study

such as social network, education level and monthly income. Chi-square was used to determine the association between demographics and adoption of social media for civic engagement. Statistical analysis proved that except monthly income rest of the demographics are associated with adoption of social media for civic engagement. So, in this way H_{o2} was partially proved.

Table 4. Social network and adoption of social media for civic engagement

| | Formal social network (≥ 20) | Formal social network (21+) | Informal social network (≥ 20) | Informal social network (21+) |
|---|-------------------------------------|-----------------------------|---------------------------------------|-------------------------------|
| Using social media for civic engagement | 89 | 187 | 147 | 129 |
| Not using social media for civic engagement | 2 | 22 | 1 | 23 |
| Total | 91 | 209 | 148 | 152 |

Table 4 demonstrated the results regarding the association between social network and adoption of social media for civic engagement. Respondents were asked to mention their informal and formal social network. ‘Informal social network’ includes family, close friends and relatives while ‘formal social network’ consists of colleagues at work place, friends of friends and other acquaintances. Chi-square was used to determine the association between two variables. When association between formal social network and adoption of social media was checked, chi- square gave p value=0.015.

Even Table 4 clearly shows that respondents having low formal social network used social media most for civic engagement than respondents having high formal social network. In case of informal social network, p value is 0.000. It means that volunteers having low informal social network used social media most for civic engagement than volunteers of high informal social network. So, both informal and formal social network were associated with adoption of social media for civic engagement.

The next variable is ‘education level’. It has four categories primary education (up to 10th), secondary education (up to +2), graduation and post-graduation. The study assumed that volunteers having high education level use social media most for civic engagement because education is needed to deal with the technology. Chi- square was used to determine the association between education level and adoption of social media for civic engagement. The p value=0.000 lead to the rejection of null hypothesis and acceptance of alternate hypothesis. Hence, it proved that there is an association between education level and adoption of social media for civic engagement.

The cross-tabulation between education level and adoption of social media for civic engagement revealed that there were 3 respondents in ‘primary education’ category. All these 3 volunteers have not adopted social media for civic engagement. In ‘secondary education’, there were 8 respondents and only 1 did not use social media but other 7 adopted social media for civic engagement. Majority (260) of the volunteers have attained education till ‘graduation’ level. Out of 260 graduated volunteers 247 were using social media and rest 13 neglected the usage of social media for civic engagement. At last, 29 volunteers were post- graduate and 22 adopted the social media usage for civic engagement and 7 did not.

Next demographic variable is ‘monthly income’. The study assumed that respondents having high monthly income use social media most for civic engagement because one

needs money to buy the technology. So, respondents earning more afford to buy laptop, desktop or smartphone through which they can use social media and participate in civic issues. Chi- square was used to determine the association between monthly income and adoption of social media for civic engagement. It gave p value= .287 which means that alternate hypothesis is rejected and null accepted. Hence, it proved that there is no association between monthly income and adoption of social media for civic engagement.

For the purpose of clarity in research monthly income was divided among four categories: <25,000, 25,000-50,000, 50,000-100,000 and >100,000 on monthly basis. Cross tabulation between monthly income and adoption of social media for civic engagement revealed that there were 13 volunteers having <25,000 income per month. Out of 13 volunteers 11 were using social media for civic engagement and 2 not using it. 173 volunteers were having monthly income between 25,000 to 50,000. Out of 173; 156 volunteers were using social media for civic engagement and 17 did not. In the next category, there were 89 volunteers earning between 50,000 to 100,000 on monthly basis. 85 of them were using social media for civic engagement and 4 not using it. In the last category of volunteers earning >100,000 per month, there were 25 respondents. Out of them 24 were using social media for civic engagement and 1 not using it. The next section discusses the association between psychographics and adoption of social media for civic engagement.

Psychographics and Adoption of Social Media for Civic Engagement

The current study has selected psychographic variables such as trust and empathy those may effect social capital. Chi-square was used to determine the association between psychographics and adoption of social media for civic engagement. Table 5 refers to the H_{a3} which says that there is an association between psychographics and adoption of social media for civic engagement.

Table 5. Psychographics and adoption of social media for civic engagement

| Trust and adoption of social media for civic engagement | | | |
|---|---|---|-------|
| Trust | Using social media for civic engagement | Not using social media for civic engagement | Total |
| Medium level of trust | 57 | 5 | 62 |
| High level of trust | 219 | 19 | 238 |
| Empathy and adoption of social media for civic engagement | | | |
| Empathy | Using social media for civic engagement | Not using social media for civic engagement | Total |
| Medium level of empathy | 28 | 1 | 29 |
| High level of empathy | 248 | 23 | 271 |

It was hypothesized that both trust and empathy is associated with adoption of social media for civic engagement. It was assumed that people trusting others most can easily involve in new relations. Thus they use social media most for civic engagement as compare to volunteers having low level of trust. Similarly, respondents having high empathy level results in helping others rather than respondents of low empathy level. So, empathy is also assumed to be associated with the adoption of social media for civic engagement. Plenty of literature was found explaining the association of these psychographics with social media usage and civic engagement. Studies reviewed were already discussed in 'literature review' section.

The current study has used chi-square to determine the association between psychographics and adoption of social media for civic engagement. Statistical analysis disproved H_{a3} because p value in case of trust= .667 and empathy=.317. So, p values in both cases are greater than .05 which led to the acceptance of null hypothesis and rejection of alternate hypothesis. It means that empathy and trust are not associated with adoption of social media for civic engagement. Thus H_{a3} is rejected.

Conclusion

The study aimed at knowing the factors responsible for the proliferation and diminution of social capital. Social capital in the current study was considered the combination of 'connectedness' and 'civic engagement'. Connectedness was related to social media usage and its linkage with civic engagement. Connectedness included adoption of social media for civic engagement, early adoption of social media and frequency of using social media tools. Statistical analysis revealed that early adoption of social media was not associated with frequency of civic engagement. Data shows that messaging services had the highest frequency on weekly basis usage.

Civic engagement was determined in form of intensity, nature and frequency. Simple percentage method proved that majority of volunteers had 'medium intensity of civic engagement'. When it comes to nature of civic engagement, data revealed that most of the volunteers participated in issue based civic engagement. Demographics and psychographics were considered as the factors effecting social capital. Analysis proved that volunteers having low informal and formal social network and high education level adopt social media most for civic engagement. On the other hand, empathy, trust and monthly income were not associated with the adoption of social media for civic engagement. Thus results proved that some factors strengthened the social capital while others deterred it.

References

- Barber, C., Mueller, T. C., & Ogata, S. (2013). Volunteerism as purpose: Examining the long-term predictors of continued community engagement. *Educational Psychology, 33* (3), 314- 333.doi: 10.1080/01443410.2013.772775
- Bekkers, R. (2011). *Trust and volunteering: selection or causation? Evidence from a 4 year panel study*. Retrieved March 7, 2013, from http://www/fsw.vu.nl/en/Images/Bekkers_POBE_11_tcm31-274938.pdf.
- Bergman, D. J. M. (2005). Access to the internet in the context of community participation and community satisfaction. *New Media & Society, 7* (1).doi: 10.1177/1461444805049146.
- Bosancianu, M. C., Powell, S., & Bratovi , E. (2013). Social Capital and Pro-Social Behavior Online and Offline, *International Journal of Internet Science, 8* (1), 49–68. Retrieved from, http://www.ijis.net/ijis8_1/ijis8_1_bosancianu_et_al.pdf
- Brunell, A. B., Tumblin, L., & Buelow, M. T. (2014). *Narcissism and the motivation to engage in volunteerism*. Retrieved May 1, 2014, from http://download.springer.com/static/pdf/553/art%253A10.1007%252Fs12144-014-9216-7.pdf?auth66=1399140580_b9c91ff9680e7dc5c8415fe992397754&ext=.pdf
- Bryant, K. W., Slaughter, J. H., Kang, H., & Tax, A. (2003). Participation in philanthropic activities: Donating money and time. *Journal of Consumer Policy, 26* (1).43–73.doi: 10.1023/A:1022626529603
- Burt, R. R. (1997) The contingent value of social capital. *Administrative Science Quarterly, 42* (2), 339- 365.<http://www.jstor.org/stable/2393923>.

- Coleman, S. J. (1998) Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, S64- S120.<http://www.jstor.org/stable/2780243>
- Flanagan, C.A., Syvertsen, A.K., and Stout, M.D. (2007). *Civic Measurement Models: Tapping Adolescents' Civic Engagement*. CIRCLE Working Paper 55. The Center for Information & Research on Civic Learning & Engagement. Retrieved January, 2012, from, (<http://www.civicyouth.org/PopUps/WorkingPapers/WP55Flannagan.pdf>)
- Hooper, P., & Stobart, S. (2003). Using third-party services to reduce the development cost and improve the effectiveness of charity websites. *International Journal of Nonprofit and Voluntary sector Marketing*, 8 (4), 328- 336. doi: 10.1002/nvsm.223
- Paik, A., & Jackson, N. L. (2010). Social networks, recruitment, and volunteering: are social capital effects conditional on recruitment? *Nonprofit and Voluntary Sector Quarterly*, 40 (3), 476- 496. doi: 10.1177/0899764009354647.
- Portes, A. (1998) Social Capital: Its origins and Applications in Modern Sociology. *Annual Review*, 24, 1-24. arjournals.annualreviews.org
- Putnam, D. R. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon and Schuster Paperbacks.
- Selbee, K. L., & Reed, B. P. (2000). *Patterns of volunteering over the life cycle*. Retrieved June 9, 2014, from <http://www3.carleton.ca/casr/Patterns%20of%20Vol.pdf>
- Smith, D. H. (1966). A psychological model of individual participation in formal voluntary organizations. *American Journal of Sociology*, 72 (3), 249-266. Retrieved from <http://www.jstor.org/stable/2775487>.
- Spreng, N., McKinnon, Mar, R., & Levine, B. (2009). *Scale development and initial validation of a factor-analytic solution to multiple empathy measures*. Retrieved January, 2012, from, (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2775495/>).
- Uslaner, M. E. (n.d.). Trust, civic engagement, and the internet. Retrieved 29, November, 2012, from <http://www.edtechpolicy.org/ArchiveWebsites/internettrust.pdf>.
- Warburton, J., Paynter, J., & Petriwskyj, A. (2007). Volunteering as a productive aging activity: Incentives and barriers to volunteering by Australian Seniors. *Journal of Applied Gerontology*, 26 (4), 333-354. doi: 10.1177/0733464807304568
- Woolcock, M., & Narayan, D. (2000) Social Capital: Implications for Development Theory, Research and Policy. *The World Bank Research Observer*, 15 (2), 225- 249. <http://wbro.oxfordjournals.org/>
- Yamagishi, T. (1986). The provisioning of a sanctioning system as a public good. *Journal of Personality and Social Psychology*, 51, 110-116. http://www.fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Self_Measures_for_Trust_TRUST.pdf.
- Zuniga, G. H., & Valenzuela, S. (2010). The mediating path to a stronger citizenship: online and offline networks, weak ties, and civic engagement. *Communication Research*, 38 (3), 397-421. doi:10.1177/0093650210384984

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