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ICT AND CIVIC ENGAGEMENT

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ABSTRACT: This is a non-comprehensive survey of documentation on the relationship between information and communication technology (ICT) and civic engagement and political participation.

Sources of the documentation include scholarly publications such as *New Media and Society* and *Political Research Quarterly* as well as development donor agency archives.

Any document without a PDF link can be obtained by the KSC.

Table of Contents

ICT AND CIVIC ENGAGEMENT

SUMMARY

There exists plentiful documentation on the impact that information and communication technology (ICT) have on political behavior. Studies from peer-reviewed academic journals most often provide case studies but development assistance donor agencies have also begun exploring the potential that exists in leveraging advantages.

International Development Application

A recent World Bank report reviews how potentially powerful technology can be and makes several recommendations to policymakers. These include taking into account less privileged-citizens in participating in ICT-related activities and when crowdsourcing and mapping data, making adjustments for more marginalized groups.[1] Building a viable ICT ecosystem entails forming a "nurturing environment of people and institutions" is needed for the best outcomes for all to be reached.[2] Finally, ICT impact must be studied using both outputs and outcomes and learning must be continual such as tracking paired outcomes with targeted communication plans, to ideally describe any qualitative impacts of relationships.[3]

Freeman and Quirke's analysis of E-democracy distinguishes between traditional E- governance that usually focuses on one-way, general service delivery and e-democracy that better promotes active two-way dialogue between the state and its citizens.[4] They compare efforts to interest youth in politics by studying a British crowdsourced constitution initiative in Milton Keynes and a government initiative in Iceland to invite 25 citizens to make inputs on constitution reform after selecting them to form a Constitutional Council to draft a new document.[5] They conclude that E-democracy is a means and not an end to democratic reform and should be taken as a part of a larger process of civic engagement and not just a series of discrete activities driven by technology.[6]

Ben-Attar and Campbell present a more-policy oriented ICT-youth civic engagement paper for the United Nations in a 2013 conference, using 50

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[1] Björn-Sören Gigler, Savita Bailur, and Nicole Anand. 2014. The Loch Ness Model: Can ICTs Bridge the "Accountability Gap"? World Bank. P. 17.
[2] Ibid. P. 18.
[3] p. 19.
[4] Julie Freeman and Sharna Quirke. 2013. Understanding E-Democracy. *JeDEM* 5(2). P. 141.
[5] Ibid. P. 147.
[6] P. 151.

examples on most continents and surveys of local youth organizations.[7] They cast "ICT urban governance" into four roles including balancing inclusiveness and responsiveness when engaging young citizens as partners in urban governance, public openness through technology, and ICT impact on outcomes for youth.[8] They summarize key challenges to progress as capacity-driven or underutilizing the potential of ICT and disparities between more ICT rich central governments and weaker local governments where budgets for ICT-enabled governance is often lacking. Recommendations include emphasizing youth and ICT in local governance on the agenda, increasing the impact of social media on local government, and supporting local government ICT capacity more backing supporting crowd-sourced data for public goods.[9]

Fei, Ning and Liang measure the potential of ICT in the context of modern authoritarian China where laws restraining access to sensitive content, political control over internet service and content providers, self-censorship, an "impenetrable firewall" and the deployment of cyber police forces, and other legal and political measures.[10] Using World Internet Project (WIP) sponsored surveys conducted in China in 2003, 2005, and 2007, and control variables including gender, age, education, and household income, and find there is no consistent demographic relationships with internet usage.[11] They also find a positive association between internet efficacy and online expression in 2003 and 2005,[12] and conclude that online expression differs and only a tenth of the internet users are active content contributors in online forums while most "remain silent". They predict the more people use the internet, the more likely they are going to post information, opinions, and responses online.[13]

Impact on Political Participation

A recent paper investigates the utilization of social media platforms by testing the subjective experiences and motivations of participants.[14] The author uses 22 adult Facebook patrons as a proxy to test civic culture and what they call "slacktivism" regarding the issue of marriage equality. He specifically measures images reflecting the Red Equal Sign Profile Picture (RESPP) Campaign as symbolic of a political and social campaign of sorts during the 2013 Presidential

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[7] Daniella Ben-Attar and Tim Campbell. 2013. Dumb Phones, Smart Kids: Impact of ICT & Mobile on Youth Engagement in Cities in the Developing World. P. 3.
[8] Ibid. P.12-19.
[9] P.25.
[10] Fei Shen, Ning Wang, Zhongshi Guo, and Liang Guo. 2009. Online Network Size, Efficacy, and Opinion Expression: Assessing the Impacts of Internet Use in China. *International Journal of Public Opinion Research* 21(4). P. 453.
[11] Ibid. P. 462.
[12] P. 464.
[13] P. 467.
[14] Joel Penney. 2015. Social Media and Symbolic Action: Exploring Participation in the Facebook Red Equal Sign Profile Picture Campaign. *Journal of Computer-Mediated Communication* 20. P. 52.

campaign and how such images can represent other broader offline activities.[15] By interviewing his subjects, he predicts the extent that can ICT act as a mobilizer but admits generalizing too much may be premature, since it may be measuring pre-existing political mobilization of users merely communicating via social media.[16]

This small N case study does suggest the phenomenon of an "empowering, up-the-ladder foundation-laying of civic culture engagement that strengthens collective identity" but little evidence to support a more "disempowering, down-the-ladder substitution of slacktivism".[17] He advocates more research on the persuasive effects of symbolic campaigns on social media platforms, a much more common instrumental form of participation.[18]

Another academic study conducted by two political scientists looks at the role that Facebook had in the 2008 Presidential Election.[19] They ask what types of political activities related to the election occurred, what factors influenced such activities and does the user's network or number of friends affect participation? The authors conclude FB users, in this case, public university students with open accounts, were more active during the primary campaign and election than during the general campaign.[20] They add however that activity during the campaign was not remarkable and users were more likely to be non-active politically than they were to be politically active, even if some political activities increased.

Those with strong political interests and awareness are more likely to use Facebook to foment social capital and contact friends but that does not translate into convincing less-interested friends to join the same activities.[21] In fact, the number of Facebook friends one has very little bearing on political participation. Finally, socio-economic differences appear to divide those who use Facebook, perpetuating a "digital divide" that could ultimately hinder any hope of cross societal ICT exposure.[22]

Similarly, Lee, Shaw and McLeod look at survey responses from 12-17 year olds and their parents over the course of the 2008 Presidential General Election in an attempt to gauge the role that communication has in motivating youth.[23]

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[15] Ibid. P. 53.

[16] P. 62.

[17] 64.

[18] Ibid.

[19] Juliet E. Carlisle, and Robert C. Patton. 2013. Is Social Media Changing How We Understand Political Engagement? An Analysis of Facebook and the 2008 Presidential Election. *Political Research Quarterly* 66: 883-895.

[20] Ibid. P. 888.

[21] P. 891.

[22] 892.

[23] Nam-Jin Lee, Dhavan V. Shah and Jack M. McLeod. 2013. Processes of Political Socialization: A Communication Mediation Approach to Youth Civic Engagement. *Communication Research* 40(5). P. 1.

They operationalize five groups of variables from two waves of panel data including civic engagement, citizen communication, news media use and parental, peer, and schooling influences.[24] They conclude that communication mediation influences socialization into political life and stimulates discussion and expression that might boost civic and political participation.[25]

Classroom intercourse expressed the most direct effects on the communication variables and the use of the Internet had a profound impact on knowledge of the news.[26] The authors add that family-centered communication has a lesser or indirect effect on civic engagement while traditional media has little role in informing or motivating respondents.[27]

Vissers, Hooghe, Stolle and Mahe´o address the linkages between internet-based mobilization campaigns to recruit political support and correctly point out that the existing literature on the impact of such applications is inconclusive.[28] They add however that distinguishing between online and offline participation may be a missing element. After testing subjects' reactions, they conclude online sources of mobilization does drive online participation but traditional face-to-face is better at increasing off-line political activities and support. In other words, the message medium matters in affecting behavior.[29]

Kittilson and Dalton examine the relationship between ICT activity, interpersonal social activity and social capital/political involvement.[30] They improve upon prior research by looking at more than simple internet usage and instead focus on social interactions that may better establish causality.[31] Group participation as a gauge over group membership captures more effectively the interpersonal interactions that social groups might facilitate to create social capital and controlling for other variables such as education, gender, race and age permits a more focused linkages.[32] They determine that as ICT-driven social interactions increase, more shared "cultural, social or political interests" will pass among fellow citizens[33] and a "virtual civil society will emerge, benefitting all by instilling more of a participatory style of citizenship and more political engagement.[34]

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[24] Ibid. P. 9-12.

[25] P. 18.

[26] 19.

[27] 20.

[28] Sara Vissers, Marc Hooghe, Dietlind Stolle and Valérie-Anne Mahéo. 2012. The Impact of Mobilization Media on Off-Line and Online Participation: Are Mobilization Effects Medium-Specific? *Social Science Computer Review* 30(2). P. 1.

[29] Ibid.

[30] Miki Caul Kittilson and Russell J. Dalton. 2011. Virtual Civil Society: The New Frontier of Social Capital? *Political Behavior* 33(4). P. 625.

[31] Ibid. P. 629.

[32] P. 638.

[33] 640.

[34] 641.

Griffin and Halpin conduct an early study on the potential of short message service (SMS) in a context of declining political interest in northern England. They conclude skeptically that young citizens are unlikely to use the mobile phone in a way that becomes the cure-all for political apathy.[35] Likely obstacles will hinder ICT-aided political expression include resources and awareness (not enough people know of the ability to use ICT for political expression), changing the application agenda (or confusing goals/strategies midway through the program, and pushback from the political leadership to the inputs of youths, especially if any inputs challenge the status quo.[36]

Smith, Macintosh and Whyte perform a similar analysis of Scottish youths' participation in an online policy debating forum that was an e-democracy component of a youth parliament.[37] The Highland Council began representing youths (12-18 year olds) in 2000 in an effort to improve their perspective of life in the region and e-democracy became a part of the process had three roles including an e-voting system and candidate manifestos, an online policy debating forum and a content management system enabling parliament members to disseminate information.[38] A follow-up questionnaire indicated students viewed using the 2004 school forum tool favorably[39] while a review of a smoking cessation plan received high marks but required more detailed inputs by users.[40]

Shah, Cho, Eveland and Kwak use national survey data from 2000 to theorize a model of the impact the Internet has on civic participation and its role in providing information and as a forum for expression. They utilize several methodologies including factor analysis and determine that media does contribute to knowledge, and therefore citizen political expression and civic engagement.[41] Online information seeking is a strong positive predictor of interpersonal political discussion and that discussion likely increases political participation.[42] In fact, online activities and use of the web as a political resource and forum surpass traditional print and broadcast media and face-to-face communication in promoting engagement.[43] They add that they are skeptical about the social capital-decreasing effects of the internet and see it as an enhancement of civicness, especially browsing and emailing for information.[44]

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[35] D. Griffin, Trevorrow, P. and Halpin, E. 2006. Using SMS Texting to Encourage Democratic Participation by Youth Citizens: A Case Study of a Project in an English Local Authority. *The Electronic Journal of e-Government* 4(2). P. 64.

[36] Ibid. P. 68.

[37] Ella Smith, Ann Macintosh and Angus Whyte. 2007. Organized Use of E-Democracy Tools for Young People. P.1.

[38] Ibid. P. 2.

[39] P. 4.

[40] 5.

[41] Dhavan V. Shah, Jaeho Cho,William P. Eveland JR. and Nojin Kwak. 2005. Information and Expression in a Digital Age: Modeling Internet Effects on Civic Participation. *Communication Research* 32 (5). P. 545.

[42] Ibid. P. 546.

[43] P. 551.

[44] 554.

Classroom intercourse expressed the most direct effects on the communication variables and the use of the Internet had a profound impact on knowledge of the news.[45] The authors add that family-centered communication had a lesser or indirect effect on civic engagement while traditional media had little role in informing or motivating respondents.[46]

Another paper confirms the notion that ICT-political participation relationships exist and that socio-economic barriers reduce the exposure of ICT to individuals who otherwise might have been otherwise politically motivated. In this study, explicit political participation such as petitioning, donating and contacting model political behavior in a latent class analysis (LCA) and three distinct types of respondents emerge: those "disengaged", "contacters" and "off-line activists".[47] The authors predict that characteristics of online activists differ significantly from offline activists in age and gender but not in income , and most importantly, those most likely to participate politically online are likely doing it offline as well. This dispels the certainty that ICT can simply mobilize all citizens who have access to it, because of convenience's sake.[48]

Noting the recent advances in ICT, Bimber uses 1996-99 survey data to test the relationship between information availability and political engagement.[49] Employing the National Election Surveys (NES) and a custom battery of questions, the author finds that there were few demographic differences among citizens who used the Internet for political purposes and political interest is less strongly associated with obtaining campaign information on the Internet than with watching television and reading newspaper articles.[50]

He also discovers that the relationship between one's age and finding campaign information on the internet is similar to age and that of reading a newspaper, and perhaps most importantly, women use the internet to find information less than men do.[51] Also having internet-provided political information and communication does not affect political participation.[52] The author concludes that political participation is not directly regulated by the cost or availability of information, thus failing to link behavioral theories of participation and technology-driven factors.[53]

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[45] 19.
[46] 20.
[47] Jennifer Oser, Marc Hooghe and Sofie Marien. 2013. Is Online Participation Distinct from Offline Participation? A Latent Class Analysis of Participation Types and Their Stratification. *Political Research Quarterly* 66(1). P. 96.
[48] Ibid. P. 98.
[49] Bimber, Bruce. 2001. Information and Political Engagement in America: The Search for Effects of Information Technology at the Individual Level. *Political Research Quarterly* 54. P. 53.
[50] Ibid. P. 60.
[51] Ibid.
[52] P. 61.
[53] 64.

Carpini warns how politically detached youth have become in the U.S. and how critical is it to create motivation, opportunity, and the ability to use opportunities for them.[54] He argues most formal institutions of public life do not offer young adults incentives to participate and political parties and candidates typically ignore a segment of the population least likely to vote.[55] He argues that citizens already politically engaged have lower costs of acquiring information and joining in activities because of the internet so bringing in those least engaged becomes the next stop.[56] ICT can provide an increased ability for organized interests to more effectively reach young adults, and more opportunities for those youths already engaged and even those interested but not yet engaged.[57] In fact, there is the possibility that ICT can boost the motivation of currently disinterested and disengaged young adults even if the negative aspects of the internet (fragmentation, manipulation, consumerism and information overload) hinder its use.[58]

Finally, Bonchek's early 1995 analysis of the potential of ICT on political participation takes a utilitarian perspective in that computer-mediated communication(CMC) facilitates collective action because of reduced transaction costs including asynchronicity, many-to-many communication, speed, low cost, and ability to automate and assimilate intelligent applications.[59] In other words, the advancement of digital technology over analog technology creates greater computational potential, magnified by cable and telephones, permitting faster messaging, more storage and easier retrieval.[60] The author cites the use of computer and electronic mail by Chinese students in the US,[61] the Public Electronic Network (PEN) in California,[62] and the Smoking Control Access Research Center (SCARC),[63] during the 1980s as ways collective action dilemmas were lessened, and social mobilization achieved.

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[54] MD Carpini. 2000. Gen.com: Youth, Civic Engagement, and the New Information Environment. P. 5.

[55] Ibid. P. 6.

[56] P. 8.

[57] 10.

[58] Ibid.

[59] Mark S. Bonchek. 1995. Grass Roots in Cyberspace: Using Computer Networks to Facilitate Political Participation. Presented at the 53rd Annual Meeting of the Midwest Political Science Association Chicago, IL on April 6.

[60] Ibid. P. 5.

[61] Li, Tiger. 1990. Computer-Mediated Communications and the Chinese Studies in the U.S. *The Information Society* 7:125-137.

[62] Varley, Pamela. 1991. "Blip on the Screen--or Wave of the Future? Electronic Democracy in Santa Monica." Case Program: C16-91-1031.0. Cambridge, MA: Kennedy School of Government.

[63] Osborn, Barbara. 1992. "Progressives Plug In." *The Progressive* 56:12.

E- Governance Application

The Obama Administration's attempts to roll-out several initiatives including e-governance platforms is the subject of Bridge, Appel and Grossklag's article as they ask possible constituent users of such an application how difficult it is to utilize and how social networking might be used during the search and participation of the application.[64]

Study respondents, in these case college students, tested the usability of applications belonging to U.S. Government agencies such as the Food and Drug Administration (FDA), Federal Aviation Administration (FAA), Environmental Protection Agency (EPA), and the White House (WH).[65] Results indicate that subjects on average used 5.8 interaction steps on search engine websites and 4.9 steps on federal government websites with the remainder on time utilized on non-profit, commercial, regional government websites and so on.[66] The authors concluded that the government websites "posed a significant challenge" and "most participants did not make the connection between government, political participation and social media".[67]

Kang and Gearhart operationalize usage of city web sites with civic engagement by employing a survey of 1966 citizens. Civic engagement is defined as membership in collective activities for establishment and nourishment of the community through active citizenry.[68] They add that city sites serve as "mass communication functions" and can survey by providing data about programs, budgets or annual reports.[69] They find that a negative relationship between overall Web surfing and political behaviors, suggesting that goal-directed use of content for the purpose of political connections rather than overall Web use might boost political activity.[70] City web sites civically engage but in a practical way by accessing city meeting agendas and permitting citizens' active participation in political activities, and offer "quality of life, cultural aspects, and

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[64] Bridges, Frank, Appel, Lora and Grossklags, Jens. 2012. Young adults' online participation behaviors: An exploratory study of web 2.0 use for political engagement. *Information Polity: The International Journal of Government & Democracy in the Information Age* 17(2). P. 164.

[65] Ibid. P. 167.

[66] P. 170.

[67] 174.

[68] Kang, Seok and Gearhart, Sherice. 2010. E-Government and Civic Engagement: How is Citizens' Use of City Web Sites Related with Civic Involvement and Political Behaviors? *Journal of Broadcasting and Electronic Media* 54(3). P. 444.

[69] Ibid. P. 447.

[70] P. 456.

citizen input opportunities that have potential to encourage citizens' participation in city development".[71]

Finally, Macintosh, Robson and Whyte question youth apathy in Scotland and do so by examining an e-democracy program called the Young Scot Initiative that utilizes a national portal.[72] Youths age 14-18 collaborate via the internet year around while participating in a model electoral assembly twice a year for three days and draw advice from adults in an executive committee.[73] The most apparent constraint to the program was access and communication as time on the students during a busy school year, reduced youth inputs, leading to a turnover of about a third among members.[74]

The authors declare e-democracy system design as critical in making applications usable for youths, and making interfaces that can do more than maintain blogs or hold chat forums necessary if not vital if serious political discussions can be held.[75] The results of these projects: 58 messages received from 108 participants in three organizations (the Scottish Executive, the Scottish Youth Parliament, and a voluntary organization, Generation/Youth), suggest some positive results but further research is needed to hone the broader applications.

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[71] 458.
[72] Ann Macintosh, Edmund Robson, Ella Smith and Angus Whyte. 2003. Electronic Democracy and Young People. *Social Science Computer Review* 21(1). P. 43.
[73] Ibid. P. 44.
[74] P. 47.
[75] 52.

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