Exploring Social Media Use and Protest Participation in Latin America

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Abstract: Recent global events, exemplified by the Arab Spring uprisings, have popularized the assumption that social media use is intrinsically connected to contemporary protest behavior. Latin America is a region with a longstanding tradition of protest behavior. This research project seeks to elucidate the relationship between social media use and protest behavior in eight contiguous Latin American countries from Mexico to Colombia using the Latin American Public Opinion Project 2012 survey data. Resource mobilization theory anchors our understanding of how social media use informs protest participation. The results indicate a strong relationship between social media use and protest participation.

Key words:

social media, protest behavior, public opinion, Latin America

1. Introduction

The spread of mass communication technology has altered human behavior in nearly every way imaginable. In fact, it is difficult to find areas of human behavior that remain untouched by this continually deepening technological penetration. But as this societal shift occurs so too do assumptions (true or not) about the mechanisms motivating the changes in individual-level behavior. This project seeks to take a step back and assess one kind of mass communication activity: social networking. Beginning with the Green Revolution in Iran and accelerating through the Arab Spring social movement, social networking has been identified as the preferred organizing tool for civic activists.¹ Anecdotal evidence of this reality abounds as political movements in the Middle East and North Africa proliferate in concert with Internet penetration and a rise in social media popularity. Time and again traditional news media identify social media as the difference maker in protest organization. This new normal appears to be dependent on the inherent difficulty in limiting Internet use and the usability of social networks (i.e. Facebook) that allow protest organizers to demonstrate a heightened level of support that inspires actual participation.

There is no reason to doubt the centrality of social media in these well publicized movements as well as trends toward prevalent social media use for civic action in more developed regions.² Recent social science endeavors have focused on understanding the role played by Internet in a variety of political events. Protest behavior is a popular area of study (Green & Kirton, 2003; Ward, Gibson, & Lusoli, 2003) for the above mentioned reasons. Also included in this growing research area is information gathering (Norris, 2000; Tolbert & McNeal, 2003), elections (Boas, 2008; Tolbert & McNeal, 2003; Ward, Owen, Davis, & Taras, 2008), and civic engagement (Jennings & Zeitner, 2003) to name a few. This research seeks to add to our understanding of mass communication development and political behavior by employing survey data research techniques in eight Latin American countries: Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, and Colombia.

Social media are "a group of Internet-based applications... that allow the creation and exchange of user-generated content" (Kaplan & Haenlein, 2010: 61). Popular social media applications include Facebook, Twitter, YouTube, and LinkedIn. Well over 150 million Latin Americans use social media applications that vary in their purpose and target audience (Simcot, 2014).³ One popular use for social media is news gathering (Anderson &

¹. For example, here is a recent article from the *The New Yorker* by Emily Parker (2014) regarding the recent pro-democracy protests in Hong Kong: <u>http://www.newyorker.com/tech/elements/social-media-hong-kong-protests</u>

 $[\]frac{2}{3}$. See Shirky (2011) for an excellent discussion of social media and politics.

³. A recent study by Author (2015) focuses on the determinants of social media use in Latin America. Many of the same factors that encourage Internet use for news gathering (Author & Albarran, 2011) also inform social media use. Individual-level characteristics such as wealth and education are inseparable from online behavior due to the nature of the devices required for that behavior.

Caumont, 2014), with much of that news being political in nature (Stieglitz & Dang-Xuan, 2014). This project employs survey data that focuses specifically on political information. Research in all contexts recognizes the popularity of social media and has begun the important task of relating that use to individual behaviors and attitudes (see for example de Zuniga, Jung & Valenzuela, 2012), thus fitting into a larger understanding of how media affect people (Bartels, 1993).

Political communication research consistently contends that media consumption affects behavior (Chafee, et al, 1978; Bartels, 1993; Delli-Carpini, 2012; Author, 2015) and attitudes (Jamieson & Cappella, 2008). The question is thus not a matter of whether or not there is an effect, but how strong the effect is and in what direction. Anecdotal evidence from recent social movements around the world highlight a heightened role played by electronic media, especially social media networks, which encourage organization and mobilization. But what inspires this mobilization specifically as it relates to protest behavior?

2. How does social media use affect protest participation?

It is impossible to consider what motivates protest participation without focusing on the collective action problem as it is well established that individuals' participation in collective events is far from certain even in the presence of purpose (Olson, 1968). All collective action is costly (Tilly, 1978) and "grievances in themselves do not produce collective action" (Carroll & Hackett, 2006, 90). For protests to be effective there must be large enough number of protest participants to deter blanket repression before the protesters demands are acknowledged (if not acceded to). This is not to say that protesters will get what they want or that they will not be arrested or otherwise repressed. But without reaching a certain magnitude threshold, the success of the protest will be in doubt (Kuran, 1991; Tucker, 2007). The nature of these costs and benefits is directly dependent on the number of people that make the same decision to participate (Granovetter, 1978), and as such these people are a key resource which must be mobilized (or appear to be mobilized) if the protest is to have any chance at success. If potential protesters feel that the protest will lack the necessary magnitude to be effective, then this will diminish participation even further. So we turn to mass media communication to understand how the perceived costs of participation can be altered, thus mobilizing protest participants.

Protests are events that are often born out of larger social movements. For movements to be successful they rely on the media to get their message out to the public (Gamson & Wolfsfeld, 1993). Increases in communication technology use, specifically mobile phones, social media, and the Internet, can further enhance information dissemination and coordination between individuals (Bimber, 1988; Coleman, 1999; Hague & Loader, 1999; Ferdinand, 2000; Simon, Corrales, & Wolfensberger, 2002; Earl & Rohlinger, 2012). Strategic use of traditional media is well-documented, with the role of alternative media (i.e. social networks) becoming part and parcel of contemporary social movements. "Alternative media are not simply a political instrument but a collective good in themselves, as they short-circuit corporate control of public communication and foster democratic conversations" (Carroll & Hackett, 2006, 88). As such, alternative media like social networks can mobilize "support personnel" which are a fundamental resource for movement success (McCarthy & Zald, 1973).

Protests require people in mass, and social networks are a tool for mobilizing those people. Organizers of protest events can disseminate information via social networks without relying on traditional media outlets. Those organizers can frame the nature of the grievance and give updates that make the average person confident that they will not be standing alone in protest. Pictures and real-time information, the calling card of social media, can enhance excitement and on-line support that can motivate avowed participants to follow through on their intention while also attracting additional participants (which even further reinforces the desires of the dedicated participants to, in fact, participate). Lastly, the ability of supporters to spread the word themselves enhances the reach and perceived reality of a successful protest. In short, online social networks mobilize resources (personnel) in an efficient and effective manner such that social media users who employ that medium for political purposes should be more likely to participate in a protest than non-users.

Social Network-Protest Hypothesis: Individuals that utilize social networking for gathering and sharing political information will report greater amounts of protest

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participation than individuals that do not employ social networks for political communication.

3. Research Design

To test the hypothesis, I measure the impact of various demographic and political variables on the dependent variable, Protest. The statistical analysis employs pooled cross-section data compiled from individual surveys administered in 2012 in eight contiguous Latin American countries; Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, and Colombia. The selection of these countries is based on the quality of comparison that is possible. They share many historical and cultural similarities with the deviation in democratic experience and economic development beginning only a few decades ago. The extent of shared characteristics should allow for better comparisons and contrasts of the statistical results.

The unit of analysis is the individual. When attempting to identify the attitudes and behaviors of individuals, few (if any) data gathering methods exceed the reliability, generalizability, and cost-effectiveness of surveys. This project employs survey data from The Americas Barometer by the Latin American Public Opinion Project (LAPOP) 2012 dataset. While other forms of data (i.e. voter turnout) rely on population aggregates that do not allow for inference based on individual characteristics, this study employs survey data with a large sample size that permits individual-level comparison of "all" individuals that is otherwise impossible. Besides their level of political activity and awareness, I also desired data that did not exclude individuals living in more remote areas. As survey sampling is often subject to cost concerns, excluding rural populations is commonplace because it is much less expensive per interview than to include rural populations. The 2012 LAPOP data set, however, includes all segments of the population – rural and urban, rich, middle class, and poor – so as to approximate a national probability sample. "Samples in each country were developed using a multi-stage probabilistic design (with quotas at the household level for most countries), and were stratified by major regions of the country, size of municipality and by urban and rural areas within municipalities" (LAPOP, 2012). The LAPOP data thus appear to adequately address those sampling concerns.

The variables in this study are represented by single-item measures and multi-item variable indexes. The choice between single- and multi-item measures was dictated by the available survey data. Whenever possible, indexes constructed from multiple items are used to increase construct validity.

The analysis employs one dependent variable. Protest is a single-item measure that presents the number of protests the respondent participated in during the last twelve months. The variable is scored 0-20, thus requiring the use of a simple OLS regression model (Woolridge, 2006). Those results are interpretable as a percentage change in the dependent variable.

The primary independent variable used to test the Social Network-Protest Hypothesis measures social network use for gathering political information. Social Network is a dichotomous variable that asks the survey respondent "in the last twelve months, have you read or shared political information through any social network website such as Twitter or Facebook or Orkut?" Answering "yes" results in a score of 1 and "no" responses are scored 0.

A set of control variables is included to ensure the proper specification of the model. By including variables that may cause changes in protest participation we are able to better isolate the effect social media use. Individual-level attributes that may affect protest participation are myriad and thus numerous behaviors and attitudes are included for precautionary reasons. Internet is a single-item measure that asks respondents to articulate how often they use the Internet. The variable is scaled 0-4 with the highest score representing "daily use".

A series of political attitude and behavior measures are also included as these beliefs and actions are often correlated with one another (Almond & Verba, 1963). To account for these potential relationships, a variety of political attitudes and behaviors are included as controls. Political Interest is a single-item measure gauging respondent's interest in politics. It is scored 1-4 with 4 denoting high interest. Contact is an index of three questions asking if the respondent contacted various public officials in order to "solve a problem." Each question is dichotomous. The index is scaled 0-3. Vote is a single-item question that asked if the respondent voted in the last presidential election. A "yes" response is scored 1 and "no" is scored 0. Meeting is an index that measures meeting attendance for various groups and institutions. That multi-variable index is scaled 0-15. Partisan is a dichotomous variable asking if the respondent identifies with a particular political party. Ideology is an ideological scale from 1-10 where 1 = "left" and 10 = "right". Tolerance is an index of four questions that ask about groups of people who say "bad things about the government" and the respondent's approval/disapproval of those people being allowed to vote, demonstrate, make speeches, and run for office. That index is scaled 4-40. Support Political Action is an additive index that asks the respondent's approval/disapproval of all people demonstrating, participating in community groups, and campaigning for a candidate. That index is scaled 3-30. No Limits on Opposition is a single-item measure that asks respondents to rate their agreement/disagreement with the statement "it is necessary for the progress of this country that the president limit the voice and vote of the opposition parties." That item is inverted and scaled 1-7 so that a score of 7 indicates a preference for no limits. Overt Support for Democracy is a single-item response that asks the extent to which respondents agree with the statement "democracy may have problems, but it is better than any other form of government." Support Authoritarianism is a single-item measure that asks respondents to agree with one of the following: don't care about government type, democracy is preferable, authoritarian could be preferable. If a respondent "agrees" with "democracy is preferable" they received a score of 0. The other two responses were recoded 1.

It is axiomatic in social scientific research that some basic attributes of individuals can affect various individual-level preferences and behavior (see Almond & Verba, 1963). For that reason, I include a series of control variables that measure an individual's age, gender, level of education, community size, socioeconomic status, and country of residence. The variable Education identifies the amount of education in years completed by the respondent and is scaled 0 to 18. Wealth is a variable which is an additive measure of various items that the respondent may or may not own. These items include a television, refrigerator, land-line phone, cellular phone, vehicle (up to 3), clothes washing machine, microwave, motorcycle, potable water in the house, bathroom in the house, computer, internet, and flat panel TV and are scored on a scale of 0 to 15. A respondent's score depends on the number of possessions that they claim. Urban identifies respondents living in an urban setting are scored 1 with nonurban dwellers receiving a score of 0. Age is a count variable ranging from 15 to 89. Female denotes the individuals' gender and is given a

value of 1 for women and 0 for men. Lastly, the country of each respondent is identified via country dummy variables. In the analysis, Costa Rica is the excluded category.

4. Results

The result of the statistical analysis is presented in Table 1. The model performed reasonably well with an adjusted R-square value of 0.061. The results provide strong support for the *Social Network-Protest Hypothesis*. Each of the findings is discussed in turn.

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Independent Variable	Coef.	Standard error			
Social Network	0.310**	0.039			
Internet	0.022*	0.009			
Political Interest	0.058**	0.011			
Vote	-0.034	0.025			
Contact	0.038*	0.017			
Meeting	0.053**	0.005			
Partisan	0.090**	0.025			
Ideology	-0.023**	0.004			
Tolerance	0.004**	0.001			
Support Political Action	0.004*	0.001			
No Limits on Opposition	0.010	0.006			
Overt Support for Democracy	0.014*	0.006			
Support Authoritarianism	0.050	0.026			
Education	-0.002	0.003			
Wealth	-0.006	0.005			
Urban	0.075**	0.025			
Age	0.001	0.001			
Female	-0.031	0.021			
Mexico – country dummy	-0.085	0.045			
Guatemala – country dummy	-0.062	0.048			
El Salvador – country dummy	-0.120*	0.048			
Honduras – country dummy	0.016	0.050			
Nicaragua – country dummy	-0.020	0.049			
Panama – country dummy	0.013	0.046			
Colombia – country dummy	0.007	0.047			
Constant	-0.265**	0.083			
N		350			
Adjusted R ²		0.061			
najubica R	0.0				

Tab	le 1:	OLS	S Re	gre	ssion	Model	for	"Protest"

*p<.05; **p<.01

Costa Rica is the excluded category to which the country dummies should be compared. "Male" is the excluded category to which "female" should be compared. The results of the OLS regression model indicate a strong, positive relationship between using social networks for disseminating or gathering political information and protest behavior. As social media use is expected to mobilize personnel to participate in protests, this finding supports the *Social Network-Protest Hypothesis*. Thus there is evidence that social media users are more likely to perceive greater benefits and fewer costs when making decisions to participate in a protest due to the support they find via the social network. General Internet use is included as a control. Even with Internet use reaching statistical significance, social media use had a stronger affect and statistical significance, illustrating the potential importance of social media use for mobilizing protest participation.

Numerous political control variables are included to ensure that the model is properly specified as political attitudes and behaviors often move in concert with one another. Latin Americans' interest in politics is positively and statistically related to protest participation. Voting is unrelated to protest participation. Contacting public officials and attending meetings of civic groups is also positively and significantly related to protest behavior. With few exceptions, political attitudes are statistically related to protest behavior. Partisanship, tolerance, supporting others engaging in political action, and overt support for "democracy" have positive and statistically significant coefficients. Latin Americans that align on the left side of the ideological scale protest more than those on the right. Supporting authoritarianism is statistically unrelated to protest participation. Attitudes about limiting opposition are statistically unrelated to protest participation.

None of the demographic control variables reached statistical significance except living in an urban community. Latin Americans that live in cities protest more than those who live in rural areas. The only country dummy variable to reach significance was El Salvador. That result was negative. Thus, relative to individuals living in Costa Rica only El Salvadorans report protesting at an appreciably different rate.

5. Conclusion

This study endeavored to understand the relationship between social media use and protest participation in eight Latin American countries; Mexico, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama, and Colombia. Rich survey data, taken from the LAPOP 2012 Americas Barometer, was employed to develop that understanding. Latin America is replete with examples of demonstrations. Region-wide, protest is often a preferred form of political participation. If there is a mechanism underpinning the anecdotal observations popularized by the Arab Spring social movement, it seems likely that evidence might exist in Latin America. This project highlights social media's ability to influence the perception of the magnitude of protest participation which subsequently increases the likelihood of a potential participant lending themselves to the protest. Thus, resource mobilization is the key to understanding the mechanism motivating the relationship between social media use and protest participation.

The test of the Social Network-Protest Hypothesis reveals strong support for the contention that social media use mobilizes individuals to fulfill their role as protest participants. Online communication via social networks allows the organizers to frame the grievances inspiring the protest and update information about participation levels which increases individual-level confidence in the efficacy of protest participation. Information is provided via posts, but individuals can respond and show support. That show of support further encourages the confidence of the social media user that a protest event will be well attended, thus diminishing potential costs and raising potential benefits. This finding is significant for moving our understanding of this relationship forward.

Future iterations of this project will benefit from an evaluation of social media penetration in the region. It may be true that social media use affects protest participation, but the number of social media users will ultimately determine the potential impact of that relationship on policy outcomes. Additionally, attempts should be made to clarify the causal relationship. It may be the case that social media use and protest participation are related in a circular manner not unlike other relationships elucidated by researchers like Norris (2000). Until that time, we can at least feel comfortable that social media use and protest are related consistently, regardless of context.

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