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Connecting With Hyperlocal News Website: Cause or Effect of Civic Participation?

Wenlin Liu[1], Nien-Tsu Nancy Chen[2], Katherine Ognyanova[3], Seungahn Nah[4], and Sandra Ball-Rokeach[5]

Abstract

This is one of the first systematic explorations into the relationship between residents' connection to a hyperlocal news website and civic participation. Integrating an ecological framework of civic participation and an audience-centered approach, the present study investigates whether residents' connection to a hyperlocal news website serves as the cause or effect of community participation. Using survey data with probability sampling of ethnically diverse residents, the study identifies reciprocal influences between hyperlocal news connection and civic participation level. Findings suggest that the civic potential of hyperlocal digital news may result from both agentic use of and less intentional exposure to it.

Keywords

hyperlocal news website, civic participation, reciprocal influences, ecological perspective, audience-centered perspective

Web-based hyperlocal news media with content contributed partially or entirely by average citizens have grown exponentially in North America, Europe, and other parts of the world in recent years (Firmstone & Coleman, 2014; Fröhlich, Quiring, & Engesser, 2012; Metzgar, Kurpius, & Rowley, 2011). Scholarship about such media is

[1]University of Houston, Houston, TX, USA
[2]California State University Channel Islands, Camarillo, CA, USA
[3]Rutgers University, New Brunswick, NJ, USA
[4]University of Oregon, Eugene, OR, USA
[5]University of Southern California, Los Angeles, CA, USA

Corresponding Author:
Wenlin Liu, Jack J. Valenti School of Communication, University of Houston, 3347 Cullen Boulevard, Houston, TX 77204, USA.
Email: wliu30@central.uh.edu

rising, with emerging literature exploring the distinctive characteristics of hyperlocal news media in terms of their content, production modes, funding structures, and democratic potential (Williams & Harte, 2016). In investigating the democratic potential of hyperlocal news, research has primarily focused on the civic motivations and empowering experience of professional and citizen content producers (Chen et al., 2017; Harcup, 2016; Yamamoto & Nah, 2017). However, few studies have systematically assessed the civic consequences on visitors of these websites who are not necessarily content producers.

This study is one of the first attempts at comparing the civic participation levels of local residents who are visitors of a hyperlocal news outlet vis-à-vis those who are not. Informed by ecological thinking, which conceptualizes news media as part of a community's communication infrastructure (Kim & Ball-Rokeach, 2006a, 2006b), this study investigates if and how hyperlocal media work in tandem with existing communication resources to shape civic participation. In particular, the theoretical mechanisms that explain the democratic potential of hyperlocal news media are examined against the backdrop of community communication context, which encompasses the sociodemographic characteristics of residents and existing communication resources in a residential area. Our inquiry begins with a description of the local community under study, where a hyperlocal news outlet has served its residents since 2010.

Study Context: Unmet Local Communication Needs in Diverse Communities

This study focuses on a hyperlocal trilingual news platform created in an ethnically diverse community, the City of Alhambra. Alhambra is a medium-size city with a population of 85,000 in Los Angeles County, California. Representative of the growing number of "majority–minority"[1] communities in California (Camarillo, 2007) and throughout the United States (MacDonald & Sampson, 2012), Alhambra has over 50% Asian population, consisting mostly of ethnic Chinese and first-generation immigrants. Latinos make up about one third of the population, and only 10% of its current residents are Anglo,[2] the historical majority of this city until a few decades ago (U.S. Census Bureau, 2010).

An important feature of this diverse community is its weak local media presence. Although the study site is well resourced with various educational institutions and recreational facilities, the city has been deprived of local media coverage (Chen, Ball-Rokeach, Parks, & Huang, 2011). Prior to the launch of the hyperlocal news outlet, the only news source that provided regular local coverage was a monthly English-language newspaper published by the city's Chamber of Commerce. Regional newspapers, such as the *Los Angeles Times*, only occasionally reported about the area, and stories were largely crime or events-related (Chen et al., 2011).

On the other hand, non-English ethnic media have been an important part of the local media system given the city's sizable population of recent immigrants. Based on a baseline survey from 2010 (Chen et al., 2013; Ognyanova et al., 2013), ethnic Chinese residents reported connecting to multiple ethnic media outlets such as the

Sing Tao Daily, World Journal, and *China Daily*. These are Chinese-language newspapers that cover international and home-country news as well as national stories in the United States, but with very limited coverage of regional or local affairs (Z. An, personal communication, July 27, 2013). Meanwhile, even though the city's Latino population is sizable, most of the Latino residents are English-speaking immigrants of second- or later generations. Consequently, *La Opinión*, the largest circulated Spanish-language newspaper in Southern California, was not as widely preferred as its Chinese media counterparts. Finally, Anglo residents were found to connect to mainstream English media outlets such as the *Los Angeles Times*, of which the coverage focus was not always about the community. In fact, data collected in 2010 survey indicated that Anglo, Asian, and Latino residents were connected to distinct sets of local communication resources (Chen et al., 2013), and there was little overlap across the three groups' daily information diets.

Ethnic diversity, coupled with the lack of community-wide news outlets, took a heavy toll on the level of civic participation (Chen et al., 2013). One of the formative research indicated that compared with a few neighboring cities, the community under study exhibited a much lower level of neighborhood belonging and civic participation (Ball-Rokeach, 2001). It was under this backdrop that a trilingual hyperlocal news website was launched in 2010 to serve the entire community's information needs and promote civic participation.

Hyperlocal News Platform: A Potential Solution to Reinvigorating Civic Life

In 2010, a hyperlocal news website, the *Alhambra Source* (https://www.alhambrasource.org/), was launched in the focal community. The development of this website was informed by previous literature on the positive relationship between local media connection and community participation (e.g., Jeffres, Dobes, & Sweeney, 1987; Shah, McLeod, & Yoon, 2001), as well as two years' formative research in the study area to understand residents' local information needs and existing communication resources for collective problem solving (Chen et al., 2011). The resulting hyperlocal news initiative follows a participatory model, where one full-time professional journalist trains and collaborates with about 100 community contributors in producing original stories about different aspects of community life, such as city government, education, and interethnic relations. In addition to original content production, the professional journalist also works with community volunteers on content aggregation and translation. While the original stories produced by citizens are predominantly in English, the journalist selects major stories each week and asks linguistically proficient volunteers to translate them into Chinese and Spanish, the two most widely spoken ethnic languages in Alhambra. In addition, news relevant to the study community is aggregated from the legacy English-language media and ethnic media on a regular basis. Along with content production, the website also engages in offline outreach, such as cosponsoring arts and cultural events in the community, tabling at local festivals and farmers' market, and hosting public discussion forums on important

local issues. Concerted effort has been made to create partnerships with community organizations so that they can supply constant information about relevant services and community issues through the *Alhambra Source*.

Since its launch in 2010, the *Alhambra Source* has produced hundreds of news and feature stories, drawn about 15,000 unique site visits every month, and received multiple local journalism awards. To more systematically assess the civic impact of the hyperlocal news website in conjunction with how residents utilized existing communication resources, a community-wide survey was conducted at the end of 2014, and data from this survey informed the current study.

An Ecological Perspective of Hyperlocal News and Civic Participation

Even though research on the civic potential of participatory hyperlocal news is thin, there is considerable scholarly attention on the more general civic influence of online news (Moeller, de Vreese, Esser, & Kunz, 2014), particularly participatory news (Kaufhold, Valenzuela, & de Zúñiga, 2010). Emerging from this line of literature is the finding that connection with such news enhances individuals' civic knowledge (Kaufhold et al., 2010) and political efficacy (Moeller et al., 2014), both of which are important preceding conditions of civic participation.

Meanwhile, it has become clear that the impact of online news is nuanced and multistaged. Along this line, scholars identified the positive interaction between the informational use of online news and interpersonal discussion (Shah, Cho, Eveland, & Kwak, 2005). The communication mediation model (Lee, Shah, & McLeod, 2013), among other theoretical frameworks, contends that media information can stimulate interpersonal discussion, which, in turn, translates information into "contact with diverse perspectives, opportunities for issue deliberation, and civic resources and recruitment" (Shah et al., 2005, p. 537).

In addition to interpersonal discussion, there are other communication mechanisms that can strengthen or attenuate the civic impact of hyperlocal news outlets. Communication infrastructure theory (CIT) provides a theoretical framework to understanding the role of key local communication processes, or the "neighborhood storytelling network," in promoting civic participation in urban neighborhoods (Kim & Ball-Rokeach, 2006a, p. 173). The neighborhood storytelling network consists of three components: residents who engage in local storytelling through neighborhood conversations; geo-ethnic media, the specific type of media that target a geographic location and/or specific ethnic groups (Kim, Jung, & Ball-Rokeach, 2006; Lin & Song, 2006); and community organizations responsible for organizing neighborhood events and mobilizing residents (Kim & Ball-Rokeach, 2006b). As an ecological framework, CIT contends that interpersonal communication, geo-ethnic media, and community organizations are interdependent—rather than isolated—storytelling agents capable of promoting local engagement (Ball-Rokeach, Kim, & Matei, 2001). Through producing and circulating community-bound narratives, these storytelling agents facilitate residents to collectively "(re) imagine" their community (Anderson, 1983, p. 2).

Empirical evidence consistently suggests that individuals' integration into neighborhood storytelling network can enhance the level of civic participation. For example, Kim and Ball-Rokeach's (2006b) work in the diverse city of Glendale, California, found that individuals' Integrated Connectedness to the Storytelling Network—an individual-level composite scale that combined measures of the one's intensity and scope of interpersonal storytelling, geo-ethnic media access, and organizational connection—was significantly associated with residents' civic engagement levels. That is, the more closely an individual was connected to the storytelling network, the more likely he or she would feel belong to the local community and participate in a range of civic activities.

While the CIT perspective recognizes the positive impact of a tight-knit storytelling network, its recent extension identifies locales, including both urban and rural communities, where many residents are disconnected from key local storytelling actors (Chen et al., 2013; Chen et al., 2017; Nah, Namkoong, Chen, & Hustedde, 2016; Ognyanova et al., 2013). In the community under study, for example, the three major ethnic groups were identified to connect to different sets of communication resources, and there was only a minimal overlap across these ethnically bound communication networks. The existing geo-ethnic media, although they partially fulfilled the information needs of certain residents, did not significantly contribute to civic participation due to their non-local orientation (Chen et al., 2013).

From the standpoint of CIT, the presence of locally focused news media could contribute to residents' civic participation through two pathways. First, given the concerted effort of the hyperlocal news website to connect its audience with community organizations and to other regional and ethnic media outlets, residents' connection to this hyperlocal news website can facilitate their overall integration into the local storytelling network, which, in turn, enhances the level of civic participation. Second, by producing locally relevant narratives, hyperlocal news media provide the necessary communication resources for residents to collectively imagine their community and partake in civic activities. To test these two mechanisms, we hypothesize:

Hypothesis 1: Residents' connection to the hyperlocal news website, the *Alhambra Source*, is likely to lead to a higher level of (a) interpersonal storytelling, (b) connection to geo-ethnic media, and (c) connection to community organizations.
Hypothesis 2: Residents' connection to the hyperlocal news website, the *Alhambra Source*, is likely to lead to a higher level of civic participation.

An Audience-Centered Perspective of Hyperlocal News and Civic Participation

To ascertain the direction of influence between hyperlocal news connection and civic participation, we also consider how individuals may perceive the utilities of different media outlets and consequently form diverging media connection patterns based on these perceptions (Loges & Ball-Rokeach, 1993). Such consideration is informed by theories such as uses and gratifications (Rubin, 2009) and media system dependency (MSD; Ball-Rokeach, 1998), both of which emphasize the active role of individuals in

shaping the audience–media relationships. The audience-centered perspective thus shifts the focus from external communication resources to internal motivations, and it accords individuals with agency in connecting or disconnecting with local informational sources. It is important to integrate the CIT perspective of civic engagement and the MSD approach that emphasizes audience agency (Ball-Rokeach & Jung, 2009), because even when hyperlocal news media like the *Alhambra Source* supply a constant stream of local stories, residents may or may not capitalize on such availability due to their different perception of media utilities.

MSD represents an audience-centered perspective and it places individuals' everyday goals at the center of understanding their media connections (Ball-Rokeach, 1998). The theory defines dependency as "a relationship in which the satisfaction of needs or the attainment of goals by one party is contingent on the resources of another party" (Ball-Rokeach & DeFleur, 1976, p. 6). In a local community, a dependency relationship is formed between residents and the local media system when the media enable residents to achieve their various goals ranging from instrumental ones such as surveillance or orientation (Weaver, 1980), to entertainment-oriented goals such as releasing negative emotions or coping with stress (Katz & Foulkes, 1962).

The *Alhambra Source* was developed to fill gaps in the local media system, where there was insufficient supply of stories about the community. We can therefore expect a strengthened local media system with the trilingual coverage from the hyperlocal news website. This strengthened system may be especially helpful when it comes to fulfilling residents' civic engagement goals. First, from the viewpoint of meeting local information needs, because news and information are important antecedents leading to civic engagement (Friedland, Napoli, Ognyanova, Weil, & Wilson, 2012; Lee et al., 2013), one's connection to the *Alhambra Source* affords greater opportunity to access locally relevant information and civic knowledge. This information provision process, however, is heavily contingent on individuals' motivation and perceived usefulness to access such information (Shah, McLeod, & Lee, 2009). As studies have suggested, one's motivation for democratic participation and prior civic engagement level are important stimuli for information seeking from news media (Lee et al., 2013). In other words, the already engaged residents might rely more on existing local media, as well as the newly launched hyperlocal news outlet to meet their information needs and achieve various participation goals.

Second, hyperlocal news media can empower local residents (Leung, 2009) and reduce the power imbalance between individuals and the local political system (Chen et al., 2017). Prior to the launch of the *Alhambra Source*, there were limited channels for residents to air alternative voices or engage in dialogue with city officials. The website thus enables the alternative civic discourse to enter the local public sphere. But similarly, different motivations of engaging with local civic life may affect residents' hyperlocal media connection decisions, as well as civic participation behaviors. Therefore, we hypothesize:

Hypothesis 3: Residents with a higher level of civic participation are more likely to connect to the hyperlocal news website, the *Alhambra Source*, than those with a lower level of civic participation.

Taken together, the ecological approach and the audience-centered approach hypothesize different directions of causal influences between one's connection to the participatory local media, connection to the neighborhood storytelling network, and the level of civic participation (Chen et al., 2013; Kim & Ball-Rokeach, 2006b). In addition to the two models, we test a third model where a reciprocal influence path is hypothesized between one's connection to the hyperlocal news website and the level of civic participation. We consider the reciprocal path model as an integration of the two complementary perspectives, and our goal is to parse out the interrelationships between hyperlocal news connection and civic participation.

We employed an analytical approach that fits several structural equation models to the same set of empirical data. This approach is particularly useful when different theoretical rationales point to multiple directions of causal influences (see similar application in Romer, Jamieson, & Pasek, 2009). Specifically, the following three configurations of models were fit to the survey data (see Figure 1).

Method

Data and Participants

Data were collected from a telephone survey administrated in the study area served by the *Alhambra Source* between February 1 and April 14, 2014, about 4 years after the launch of the website. To recruit sample reflective of the community's demographics, quota sampling was used, where a total of 150 Chinese, 150 Latinos, and 100 Caucasian/non-Hispanic Whites were targeted,[3] and the recruitment was made through random-digit dialing combined with postcard invitations. The postcard strategy was designed to target the households that might not have landlines, which are increasingly common in public opinion surveys (Blumberg & Luke, 2009). To qualify for participation, residents must be more than 18 years old and with a residential tenure of at least 2 years. Each survey lasted for approximately 35 minutes and was conducted in the language preferred by the respondent among English, Spanish, and Mandarin/Cantonese.

Among the 400 interviews, 286 (71.5%) were conducted in English, followed by 90 (22.5%) in Mandarin or Cantonese, and 24 (6.0%) in Spanish. The final sample included 50% females (compared with 50.8% at the city level). The average age was 58.7 years, which was notably older than the city average, and the average residential tenure was 22.9 years. The median household income was $40,000 (compared with a city-level median at $53,889), and 92.2% of respondents had educational level at "high school graduate or higher" (compared with 86.7% with "high school graduate or higher" at the city level; U.S. Census Bureau, 2015).

Measures

Endogenous Variable

Civic participation. A 10-item civic participation index was used to assess respondents' involvement in a range of political, civic, and voluntary activities. Going beyond

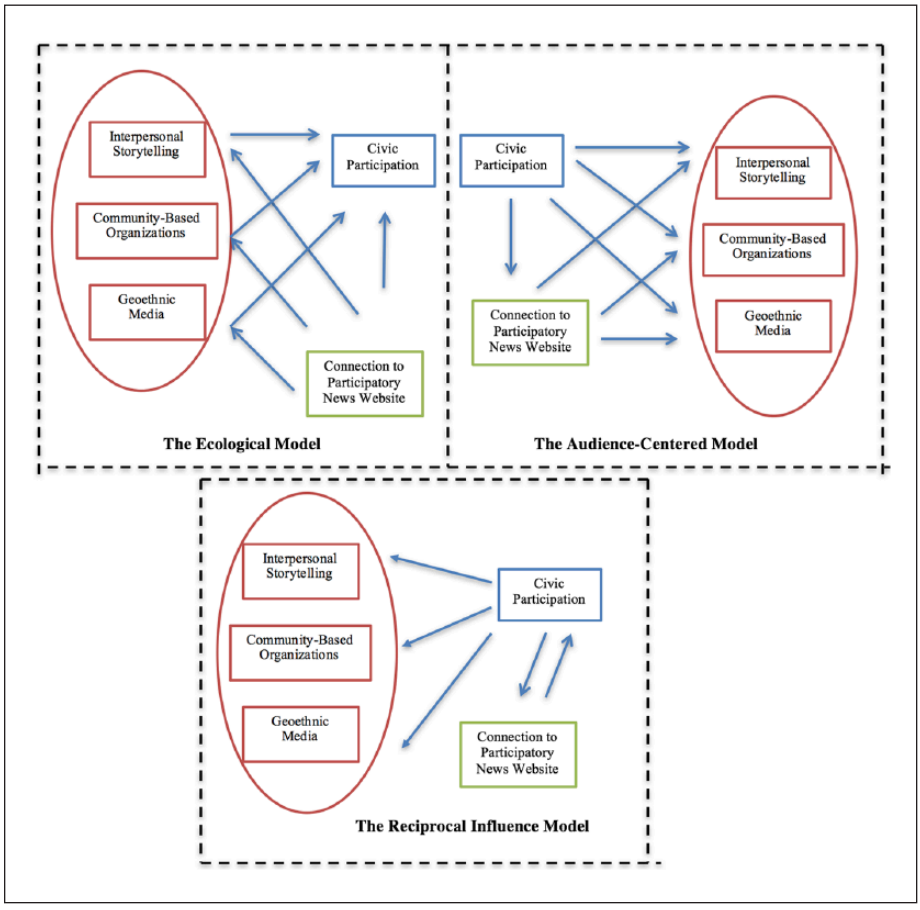

Figure 1. Hypothesized relationships among the connection to the hyperlocal news website (PNW), connection to neighborhood storytelling network (STN), and civic participation, based on the communication infrastructure theory model, the media system dependency model, and the reciprocal influence model.

Note. For the clarity of presentation, the figure only shows the paths among storytelling variables, hyperlocal website connection, and civic participation.

items pertaining to local political participation (Kim & Ball-Rokeach, 2006b; McLeod et al., 1996), the present scale also included questions to assess participation in nonpolitical civic activities, such as "volunteering for a social cause or neighborhood initiative," "donating to support a political, social, or charitable cause," and "boycotting a brand or product." In each question, respondents were asked to indicate if they had engaged in the identified political, civic, or voluntary activity during the past 2 years (0 = "no" and 1 = "yes"). A composite variable was computed by adding respondents' score on the 10 questions ($M = 2.73$, $SD = 2.20$).

Exogenous Variables

Interpersonal neighborhood discussion. The frequency of interpersonal neighborhood discussion was assessed by a single question that asked, "How often do you have discussions with other people about things happening in your neighborhood" at a 10-point scale, from *never* to *all the time* ($M = 4.72$, $SD = 2.71$).

Connection to community organizations. Respondents were asked to name up to two organizations they or their family members belonged to, for each of the following seven categories, including "1— sports or recreational organizations," "2—cultural or ethnic organizations," "3—churches or religious organizations," "4—charitable organizations," "5—schools or educational organizations," "6—political or civic organizations," "7—other neighborhood organizations." To select organizations that were locally based, respondents were further asked to identify whether the nominated organizations were located within, or outside the city of Alhambra. For each category, any nomination of local organizations was coded as "1," and an 8-point scale (0 to 7) was created by adding each item up ($M = 0.58$, $SD = 0.65$).

Connection to geo-ethnic media. Respondents' connection to geo-ethnic media was assessed in a two-step process. First, respondents were asked about their top two ways of staying on top of their community. If they identified television, radio, and newspapers, or the Internet, they were further asked whether the media outlets were mainstream, or they were produced specifically for their ethnic group or the residential area (i.e., "geo-ethnic"). Respondents whose top two choices did not include any geo-ethnic media were coded as "0," those with one being geo-ethnic media were coded as "1," and respondents with both identified as geo-ethnic media were coded as "2" ($M = 0.58$, $SD = 0.65$).

Connection to the hyperlocal news website. Respondents were asked that how often they visited the website on an 8-point scale from *never* to *daily*. Forty-two (10.5%) respondents indicated that they visited the website at least occasionally. These respondents were subsequently recoded as "1," indicating an active connection with the website, while the others were coded as "0" (i.e., not connected to the website).

Control Variables. Socioeconomic background including gender (50% female), age ($M = 58.65$, $SD = 17.81$), ethnicity (25% White, 37.5% Asian, and 37.5% Latino), income ($M = \$49{,}675$, $SD = \$29{,}665$), and education (a 7-point scale from 1 = *middle school or less* to 7 = *graduate degree,* $M = 4.49$, $SD = 1.63$) were included as control. Other control variables included residential tenure ($M = 22.91$, $SD = 16.46$), home ownership (52% owners), and intention to stay in the community (76.75% indicated "yes"). Given the large percentage of immigrants in the community, immigration generation was also included in the model. Specifically, respondents were asked who in their family first came to the United States. Those reporting themselves or "spouse, sibling, child, niece, or nephew" were coded as "1 = first generation" (31.25%); "parents, aunty, or uncle" as "2 = second generation" (31%); "grandparents" as "3 = third

generation" (17.5%); and "great grandparents or earlier" as "4 = fourth generation and beyond" (17.75%).

Analysis

The *lavaan* package for structural equation modeling on the platform of *R* (Rosseel, 2012) was used to estimate the direct and indirect paths among the set of endogenous and exogenous variables. The significance level for all parameter estimates was set at $p < .05$, and maximum likelihood was used to produce those estimates. To evaluate the three theoretical models, a chi-square to degrees of freedom ratio, the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the Akaike information criterion (AIC) were obtained from each model. A satisfactory model should have the chi-square to degrees of freedom ratio less than 5, the CFI value greater than .90 (Bentler, 1992), and the RMSEA index less than .10 (Jöreskog & Sörbom, 1993). The AIC index was used to compare the fit of different models (Akaike, 1987). The lower the AIC value, the higher level of fit a model shows.

Results

About 10.5% of the respondents indicated connecting to the hyperlocal news website, a penetration rate comparable with similar hyperlocal news projects in the past (e.g., Chyi & Lasorsa, 2002). Table 1 compares the socioeconomic and communication profiles of website connectors versus nonconnectors. The 42 individuals connected to the news website largely reflected the demographics that are generally better connected to the Internet (van Deursen & van Dijk, 2010). The connectors were significantly younger, $t(398) = 6.35$, $p = .000$, wealthier, $t(359) = 2.65$, $p = .009$, and they consisted of more male as well as Anglo and Latino residents. In addition, the hyperlocal news website connectors exhibited a significantly lower level of connection to geo-ethnic media, $t(398) = -3.16$, $p =. 002$, but higher level of connection to community organizations, $t(398) = 1.42$, $p < .05$. They were also significantly more active than the nonconnectors in terms of the civic participation level, $t(398) = 5.47$, $p = .000$.

Modeling Civic Participation

Table 2 reported goodness-of-fit indices for the three hypothesized models. All major fitness indices, including chi-square to degree of freedom ratios, CFIs, and RMSEAs all met satisfactory levels, suggesting that the hypothesized models fit the observed data well. The comparison of AIC index indicated that Model 2, the audience-centered approach, had relatively better fit than the other two models. Among the three path models, Model 1 was formulated based on the CIT perspective of civic participation, where the direction of influence flowed from one's hyperlocal news website connection to the integration into the neighborhood storytelling network (Hypothesis 1) and the

Table 1. Means and Standard Deviations of Sociodemographic, Storytelling, and Civic Participation Variables Among Connectors and Nonconnectors to the Hyperlocal Website.

	Hyperlocal website connectors (n = 42)		Hyperlocal website nonconnectors (n = 358)	
	M	*SD*	*M*	*SD*
Gender (female, %)	33.3	—	52.0	—
Age	49.36	19.90	59.74	17.25
Income ($)	66,689	42,307	50,062	35,468
Education	4.79	1.49	4.46	1.64
Residential tenure	22.10	16.41	23.00	16.48
Homeownership (owners, %)	59.5	—	51.1	—
Stay intention (yes, %)	64.3	—	78.2	—
Anglo (%)	33.3	—	24.0	—
Hispanic (%)	42.9	—	36.9	—
Asian (%)	23.8	—	39.1	—
Interpersonal neighborhood storytelling	5.67	2.52	4.61	2.71
Connection to community organizations	0.83	1.06	0.64	0.82
Connection to geo-ethnic media	0.29	0.51	0.62	0.66
Civic participation	4.43	1.06	2.53	2.08

Table 2. Comparisons between the CIT Model, the MSD Model, and the Reciprocal Influence Model among the Connection to the Hyperlocal News Website (PNW), Connection to Neighborhood Storytelling Network (STN), and Civic Participation.

	Model	χ^2	*df*	CFI	RMSEA	AIC
1	The ecological model: PNW → STN STN → Civic participation PNW → Civic participation	9.84	3	.93	.02	245.85
2	The audience-centered model: Civic participation → STN Civic participation → PNW STN → PNW	7.03	3	.98	.06	189.72
3	The reciprocal influence model: Civic participation → PNW PNW → Civic participation STN → Civic participation	13.09	9	.98	.03	210.66

Note. CIT = communication infrastructure theory; MSD = media system dependency; *df* = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation; AIC = Akaike information criterion.

Figure 2. Significant paths from the hypothesized CIT model (Model 1), hypothesized MSD model (Model 2), and the hypothesized reciprocal influence model (Model 3).
Note. CIT = communication infrastructure theory; MSD = media system dependency. For clarity of presentation, the figure only shows the paths among storytelling variables, hyperlocal website connection, and civic participation. Solid lines indicate positive associations, and dashed lines indicate negative associations.

level of civic participation (Hypothesis 2). Informed by the audience-centered model, Model 2 hypothesized opposite directions of influence where civic participation led to a greater level of storytelling network integration and connection to the hyperlocal news media. Finally, Model 3 hypothesized the reciprocal influence between hyperlocal news media connection and civic participation. Figure 2 presents the path diagrams with all significant paths displayed with estimated coefficients.

Hypothesis 1 posited that one's connection to the hyperlocal news website positively contributed to one's integration into the neighborhood storytelling network, indicated

by the level of interpersonal storytelling (Hypothesis 1a), the level of geo-ethnic media connection (Hypothesis 1b) and the level of connection to community-based organizations (Hypothesis 1c), and these hypotheses were partially supported. Specifically, the path analysis results showed that the hyperlocal news website connection was not significantly related to one's connection to community organizations, but it led to a significantly higher level of interpersonal storytelling ($b = 1.10$, $p = .017$). However, contrary to what was hypothesized, it was negatively related to one's connection to geo-ethnic media ($b = -0.23$, $p = .033$).

Hypothesis 2 posited that one's connection to the hyperlocal news website could promote civic participation, and this hypothesis was supported with great statistical significance ($b = 1.47$, $p = .000$). Other significant paths in the model suggested that residents' connection to interpersonal storytelling ($b = 0.15$, $p = .000$) and their connection to community organizations ($b = 0.77$, $p < .00$) led to greater civic participation, whereas one's connection to geo-ethnic media negatively predicted the civic participation level ($b = -0.19$, $p = .04$).

The audience-centered perspective of hyperlocal news media connection and civic participation was reflected in Model 2, where the hypothesized influence flowed from civic participation to one's connection to the hyperlocal news website and three storytelling agents. Hypothesis 3 hypothesized that civically engaged individuals were more likely to connect to hyperlocal news media to fulfill their information and civic needs, and this hypothesis was well supported ($b = 0.04$, $p = .000$). Meanwhile, civically engaged individuals were found to have a higher level of interpersonal storytelling ($b = 0.39$, $p = .000$), higher level of connection to community-based organizations ($b = 0.16$, $p = .000$), and lower level of connection to geo-ethnic media ($b = -0.04$, $p = .011$). Finally, according to the results obtained from this model, one's connection to the hyperlocal news website did not significantly contribute to the integration into the local storytelling network, as no significant paths were identified between hyperlocal news website connection and the three storytelling agents.

Last, the third model tested the reciprocal influence model. Findings from this model suggested that one's prior civic participation level drove one's decision to connect to the hyperlocal news website ($b = 0.04$, $p = .000$). At the same time, the connection to the hyperlocal news website also led to a higher level of civic participation ($b = 1.49$, $p = .02$). Other significant paths included the positive flow of influence from one's civic participation to a higher level of interpersonal storytelling ($b = 3.75$, $p = .023$) and greater connection to community organizations ($b = 0.15$, $p = .000$). On the other hand, geo-ethnic media connection was found to have a negative influence on one's civic participation level ($b = -0.03$, $p = .02$), a finding that consistently emerged across all three models.

Discussion

This study investigates the role of a hyperlocal news website, the *Alhambra Source*, in reinvigorating civic participation in a diverse community. It unfolds the underlying mechanisms through which the hyperlocal news website brings about change in the

local communication environment and civic dynamism. One of the most notable findings deals with the reciprocal influence identified between one's hyperlocal news connection and civic participation. This suggests that the underlying processes that unleash the civic potential of hyperlocal media are more nuanced than what was previously found. That is, hyperlocal digital media are not always about a one-way transmission of information; they serve to strengthen the local communication infrastructure through which more residents are incorporated in local civic life.

The media effects literature has long emphasized the direct information effects as well as indirect effects of news media on civic behaviors through activating interpersonal communication (e.g., McLeod, Scheufele, & Moy, 1999). While our evaluation study supports these claims, it also extends the one-way influence model of civic communication. By treating the focal website as an integral part of the local communication system, the interaction between this communication system and local residents is viewed as both dynamic and reciprocal. On the one hand, our analysis suggests that in a residential area long experiencing the deficit of media coverage, the launch of a hyperlocal news outlet helps fill the information void and contributes to the community's civic vitality. However, residents are by no means connected to this hyperlocal website in a passive way. The audience-centered model results suggest that those who are already civically engaged are more likely to connect to the website, perhaps due to their active seeking for information and engagement space that was not available previously. It thus entails that the strategies to promote hyperlocal news media adoption should extend beyond merely providing community information. To tap into a community's existing civic networks, such as forming partnership with community activists and local organizations, may be an effective pathway to increase audienceship while engaging residents (Nah et al., 2016). Finally, the reciprocal path of influence model suggests that the civic potential of a hyperlocal news website could lie in its capacity to create a virtuous cycle, where one's hyperlocal media connection feeds into greater civic participation, and such participation, in turn, promotes more frequent and richer interaction with the hyperlocal website.

The observed "connection divide," that is, the disparate levels of connection to the hyperlocal news website, is not only manifested between the more engaged versus less engaged individuals, but also characterized by an ethnicity-based difference. In post hoc analyses, Asian residents exhibited a disproportionally lower level of website connection. With Asians making up more than half of the local population, only a little over 20% of the website "connectors" were of Asian backgrounds. The census data indicate that Asian residents are more likely to be newcomers to the community under study, with 76.2% of Asian residents foreign born, compared with 21.2% of Latinos and only 2.4% of Anglos (U.S. Census Bureau, 2010). Overall, Asian residents have lived in the community for a shorter period, with a larger proportion (56.6%) speaking English "less than very well" compared with the other two ethnic groups. The distinct demographic profiles thus suggest that cultural and language barriers may still be important factors that hinder Asian residents from connecting to the hyperlocal website, despite the website's trilingual operation.

The challenge to engaging immigrants and ethnic minorities of the community represents a long-standing issue regarding digital divide as well as participation divide (Norris, 2001). The current findings highlight this challenge, as Asian residents in the community appear to rely more on ethnic media, and such media connections are actually negatively associated with civic participation. This brings the issues of local media adoption, community communication intervention, and diverse community outreach to the forefront. Evidently, effective outreach would require more than linguistic accessibility. In our case, to more effectively engage Asian residents would entail creating content that is more culturally appealing while locally relevant. Given the strong reliance on Chinese language ethnic media among Asian residents, future outreach may consider better utilizing those platforms through content-sharing or collaborative content production. Along with more targeted content curation, future intervention would also benefit from personal network-based outreach. It might be particularly helpful to recruit community contributors of Asian backgrounds, especially "opinion leaders" who would have large ethnic networks and capable of promoting new media adoption within such networks.

Conclusion

There are several limitations in the current study. First, the cross-sectional nature of survey data limits our ability to make conclusive claims. Future research may use a longitudinal panel design to better assess the causal relationship between one's hyperlocal website connection and civic outcomes. In addition, the 4-year operation period of the website may not provide enough time to reach a sufficiently high level of penetration. With 10.5% of the survey respondents indicating that they were connected to the website, the skewed sample may not allow us to make more generalized claims regarding the ultimate effect of this hyperlocal news website. Therefore, findings from the current study are worth replicating at a future date, when the website grows a larger audience base. However, it is worth noting that a connection rate at 10.5% is respectable even in comparison with prestigious legacy media. For example, Chyi and Lasorsa (2002) found the online penetration rate of national newspapers, such as the *Wall Street Journal* and *USA Today*, ranged between 10% and 14%. The online penetration rate of a local newspaper in Austin, *Austin American-Statesman*, was at 18%. It remains to be seen whether there is a ceiling effect on the reach of hyperlocal news outlets in a community, and the level of audience reach may further determine whether the observed effects in the current study are scalable.

In addition, participants in our study reported relatively strong intention to stay in their residential community in the foreseeable future. This might result from our sample selection criterion that survey respondents must have lived in the community for at least 2 years. While this criterion was used to make sure that participants had some knowledge of the community, we recognize that it may filter out the most recent newcomers and individuals who were more mobile due to work or other circumstances. Furthermore, participants in our study represented the relatively older spectrum of the population. While age has been found to positively predict civic participation (e.g., McLeod et al.,

1999), it may attenuate the positive impact uniquely contributed by the hyperlocal news website. Future research should therefore consider younger and more recent settlers of the community to see if their civic participation level can be enhanced to the same degree. Finally, future studies are encouraged to employ complementary methods, such as participant observations or interviews with website audience, to better understand its audience background, as well as the process through which the civic effects of a hyperlocal news website take place.

Using a diverse community with an established hyperlocal news website as a case, this study makes several contributions to the current understanding of hyperlocal news media and their role in promoting civic participation. First, by collecting representative community data, this study presents a rare effort to systematically investigate if and how a hyperlocal news initiative might contribute to the change in civic participation level, especially among those who are not necessarily content contributors. Through comparing multiple path models, this study rigorously tests the utility of different theoretical perspectives in explaining the role of the focal news website, and identifies a reciprocal path of influence among residents' website connection and civic outcomes. It therefore demonstrates the utility of integrating complementary theoretical perspectives, specifically CIT and MSD, in understanding the effects of a participatory local media and ways to improve its community outreach and engagement capacities.

Second, the study sheds light on effective recruitment strategies to reach linguistically and culturally diverse populations. With a growing presence of diverse communities, how to forge a strong sense of community belonging and intergroup solidarity is often intertwined with the promotion of civic engagement (Liu et al., 2018). The community under study represents this emerging form of communities, and future research is encouraged to evaluate the civic consequences of similar hyperlocal media in other multiethnic communities or in areas that show significant deficit of local communication resources. With the majority of survey research today administered in English, it is particularly worth noting that the current study utilized trilingual survey and reached a segment of population that would not have been reached otherwise. Therefore, the findings are particularly meaningful for future work focused on multiethnic communities.

Third, the positive flow of influence from civic participation to connection with the focal website offers practical implications for community outreach. Although traditional media effects research emphasizes causality in the other direction, our findings highlight the agency of local news consumers and present an alternative for community outreach through a two-step model. That is, by recruiting individuals who are already active in the community and utilize their "opinion leader" role, future outreach may better leverage such reciprocal influences and promote participation at a greater scale.

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Notes

1. The "majority–minority" community refers to the type of communities experiencing a shift of demographic composition, where the majority of their populations are racial and/or ethnic minorities. As of 2015, there are a number of majority–minority states including California, New Mexico, Hawaii, Nevada, and Texas (U.S. Census Bureau, 2015). For a list of cities in California where ethnic minorities constitute the majority of the population, refer to Lou, Lee, Guardado, and Myers (2012).
2. In the United States, the term "Anglos" refers to White Americans of not only English heritage but more generally non-Hispanic ancestry.
3. The quota for each ethnic group was set based on (a) the demographic composition of the community and (b) the sample size from the baseline survey in 2010 ($N = 405$).

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Author Biographies

Wenlin Liu is an assistant professor in the Jack J. Valenti School of Communication at the University of Houston. Her research interests include multiethnic community building, organizational collaboration, and social network analysis.

Nien-Tsu Nancy Chen is an assistant professor of communication at California State University Channel Islands. Her research interests include health communication and civic engagement.

Katherine Ognyanova is an assistant professor in the School of Communication and Information at Rutgers University. Her research interests include network science, media effects, and communication technologies.

Seungahn Nah is a professor and associate dean for graduate affairs and research in the School of Journalism and Communication at the University of Oregon.

Sandra Ball-Rokeach is a professor in the Annenberg School for Communication and Journalism at the University of Southern California. She is also the Principal Investigator of the Metamorphosis Project (http://metamorph.org/). Her research interests include mass media effects, transformation of urban communities, and immigration.