Can Social Media Save a Neighborhood Organization?

BONNIE J. JOHNSON & GERMAINE R. HALEGOUA

Abstract
Positive discourse around social media and civic engagement inspired a neighborhood association with few members and resources to use these services. They hoped to revive the neighborhood association and attract new and younger members. They received five Facebook ‘likes’ and three Twitter followers out of 550 households. Survey results revealed a mismatch between perceptions of ‘neighborly’ and social media ties and expectations for neighborhood communication. However, residents most interested in the neighborhood association were those who chose social media for neighborhood outreach, not those choosing email or postal mail. Ultimately, using multiple communication methods is ideal, but targeting residents via social media might be a starting point for planners and resource poor organizations.

Keywords: neighborhood associations; neighborhood participation; social media; community informatics; civic engagement

Introduction
Urban planning and community informatics literatures present social media (with some caveats) as inexpensive and immediate forms of communication (Shah et al., 2001; Kavanaugh et al., 2007; Kim et al., 2007; Evans-Cowley, 2010; Mandarano et al., 2010; Williamson & Parolin, 2013). Additionally, research on communities and Internet use, email, websites, and social media is encouraging in terms of online connections becoming offline interactions in place-based communities like neighborhoods (Arnold, 2003; Carroll & Rosson, 2003; De Cindio et al., 2003; Hampton & Wellman, 2003; Hampton, 2007; Kavanaugh et al., 2007; Kim et al., 2011). Results from some neighborhoods sound very encouraging with an author noting, ‘while writing this article one of the authors communicated with three neighbors via Facebook to plan a potluck dinner’ (Evans-Cowley & Hollander, 2010, p. 397). However, these studies often focus on experimental information and communication technologies (ICTs) installed in neighborhoods by researchers, neighbors using ICTs during crises, neighborhoods with strong social networks, or planners asking residents to participate in formal planning processes. There is a gap in the literature in terms of the potential of neighbors using social media
themselves to rebuild social networks or revitalize their own neighborhood associations.

What happens when a failing neighborhood organization tries to revive itself using social media? Under what conditions is social media helpful for neighborhood re-engagement? To address these questions we conducted a study with an established neighborhood in a mid-sized, Midwestern city in the USA. In the last 10 years, neighborhood association participation rates tumbled from over 100 active members to fewer than 10. The association was going to dismantle after 38 years. However, inspired by the positive discourse around social media, the remaining officers turned to Facebook, Twitter, and email to rebuild ties and ultimately the neighborhood association. The sites were launched and advertised but resulted in no comments, responses, or retweets, and only five ‘likes’ on Facebook, three Twitter followers, and two new email addresses out of 550 households. We conducted a survey with neighborhood residents to understand why they did not join these social media networks and why they were not engaged with the neighborhood association. The lessons learned from this experiment can guide the use of social media by neighborhood organizations and by those seeking to engage with neighborhoods, such as, planners (Brown & Chin, 2013). Formal planning processes often fail to recognize informal mutual aid societies and neighborhood groups that are shaping and creating ‘place,’ independent of official institutions (Irazábal & Neville, 2007). This research explores neighbor-to-neighbor communication networks, which can inform the work of planners (Silver, 1985; Illsley & Coles, 2009).

We begin with a look at the literature on neighborhood organizing summarizing what accounts for low participation. This literature review helps define reasons beyond communication that may account for a lack of interest in a neighborhood association, which are used in this study’s regression models. The existing research on ICTs and their usefulness to place-based groups, like neighborhoods, lays the foundation for explaining the study results in more detail. After the literature overviews, our case and methodology (regression and content analysis) are introduced. The results reveal who is supportive of having a neighborhood organization and their communication preferences. The discussion explores respondents’ expectations about how neighbors ‘ought’ to communicate with each other. Some research limitations, implications, and recommendations for social media use by neighborhood organizations and planners are then offered.

**Sense of Community and Neighborhood Organizing**

Successful neighborhood associations often have good leadership with a record of success (Chavis & Wandersman, 1990; Florin & Wandersman, 1990; Itzhaky, 1995; Backman & Smith, 2000; Christens, 2010). Well-connected neighborhood leaders with access to other community services (advice, money, volunteers) can more efficiently address residents’ issues versus spending time maintaining the organization (Unger & Wandersman, 1985). Ohmer (2008) described an empowering organization as having: democratic processes, a formal structure, sociability, and shared responsibilities. Empowered neighborhood associations are good at making participation easy for members. In other cases, neighborhood
organizations are all ‘leadership’ in that they rely on the work of a few because there is no larger ‘we’ sentiment (McKenzie, 1921; Tannenbaum, 1948; Silver, 1985).

‘Place’ and an attachment or loyalty to one’s neighborhood is another ingredient in forming neighborhood organizations (Itzhaky, 1995; Perkins & Long, 2002). Kotler (1969) emphasized that a neighborhood is not a neighborhood unless it has a name and boundaries, which are helpful in turning informal relationships into formal organizations that then interact with local governments, planners, and other groups (Taylor et al., 1984). Neighborhoods are training grounds for democracy and voluntary local organizations are important links in urban service delivery from health promotion to crime prevention (Olson, 1982; Chavis & Wandersman, 1990; Irazábal & Neville, 2007; Illsley & Coles, 2009). Often, neighborhoods organize because they face a threat (Chavis & Wandersman, 1990), which is a good way to start an organization, but without a sense of community, the organization is hard to maintain after the crisis fades or people tire (Hillier, 2002). Similarly, a neighborhood full of very self-sufficient residents will not push for a neighborhood organization either (Riger & Lavrakas, 1981).

An individual’s sense of community and relationships with neighbors influences the formation and success of local groups (Chavis & Wandersman, 1990). Sense of community has been measured by: community bonds, empowerment, control, children’s safety, neighborhood satisfaction, expected length of residence, walkability, political efficacy, and neighboring behaviors (knowing neighbors’ names, borrowing tools) (Warren, 1977; Doolittle & MacDonald, 1978; Glynn, 1981; Chavis & Wandersman, 1990; Martinez et al., 2002; Perkins & Long, 2002; Peterson et al., 2008). A sense of community can also be influenced by the physical design of the neighborhood, such as, having sidewalks or front porches (Brown & Cropper, 2007). Since communication and maintaining and activating social networks play major roles in creating a sense of community within a neighborhood, it is not surprising to see why planners as well as neighborhood residents or neighborhood associations would be attracted to social media as an organization and communication tool.

Use of Social Media or Digital Technologies for Place-based Organizations

Researchers, technology designers, community organizers, and urban planners have noted the potential of social media and digital technologies for creating ‘information grounds’ and immediate, cost-effective means of connection and communication within neighborhoods (Fisher & Naumer, 2006; Kavanaugh et al., 2007; Kim et al., 2007). However, we need further research on how and under what conditions digital applications, like social media, are successful (Pinkett, 2003; Meredith et al., 2004; Evans-Cowley & Hollander, 2010). As many researchers have been careful to note, access to ICTs will not automatically create or incubate social networks where none previously existed (Hampton, 2003; Hamton & Wellman, 2003; Foth, 2006a, 2006b; Gaved & Foth, 2006) and these networks must mesh with local contexts in order to foster engagement (Ball-Rokeach et al., 2001; Postill, 2008).
Findings from community informatics studies are tempered with opportunities and risks associated with digital networking (Schuler, 1996; Gurstein, 2004; Carroll, 2012). Yet this literature generally adheres to the perspective that communities can be ‘empowered’ by ICTs if residents and communities transform themselves into authors and audiences for flows of intra and inter-community communication (Gurstein, 2004, p. 2). Although technologies like the internet and mobile phones aid communication across vast geographic distances, they have also been found to enhance communities of place in terms of coordination and mobilization, social capital, and interpersonal or collective relationships (Wellman, 1999; Wellman & Hampton, 1999; Kavanaugh & Patterson, 2002; Pigg & Crank, 2004; Ellison et al., 2006). Also, ICTs are often employed as ways to enhance and create opportunities for face-to-face interactions (Hollan & Stornetta, 1992; Hampton & Wellman, 1999; Cooperrider & Avital, 2004; Carroll, 2012). For example, Hampton (2003, p. 420) argued that a neighborhood listserv provided residents with ‘specific cultural capital in terms of knowledge of local events, local services, and the opinions and activities of other residents’ which lead to face-to-face interactions. Nevertheless, Hampton et al. (2011) found that place-based relationships have slightly less resonance for social media users, which might be linked to previous findings (Hampton, 2007) that residents with few neighborhood ties are more likely to use social media in their daily lives (Hampton et al., 2011, p. 1046).

In a study on social capital within ‘wired’ neighborhoods, Hampton and Wellman (2003) discovered that wired residents generally had more neighborhood connections than non-wired residents, and the use of ICTs such as email, online forums, and listservs helped to create large, dense networks of weak ties, which facilitated community organizing. Scholars note that neighborhoods with ICTs are better equipped to address local concerns and online community networks can be readily utilized to address issues and create spaces where co-located community members can work collaboratively to solve problems (Pattavina et al., 2002; Hampton, 2003; Foth & Brereton, 2004; Carroll, 2012). In one neighborhood, Netville, information flows were improved inexpensively (in terms of time, cost, effort), and listservs and forums created new visibilities for networks of action and ‘neighborly’ actions online reassured participants that others were invested in community ties (Hampton, 2003, p. 425). However, during moments of stability, when Netville was not dealing with an issue, activity on the neighborhood message boards and email lists decreased.

In terms of digital technology adoption rates, only a minority of residents in the USA engage with neighbors or neighborhood associations via digital technologies. The most recent US national survey of modes of online neighborhood communication was conducted by Pew in 2010 (‘Neighbors Online’). The study found that approximately one in five Americans used digital tools (such as email and mailing lists, social media, blogs, and websites) to communicate with neighbors and monitor community developments (Smith, 2010). Email was the most common digital means of communication, with more parents than non-parents reaching out to neighbors via email as well as face-to-face. Only a small percentage (~14%) of social networking site (SNS) users utilized social media to communicate with neighbors. People who do not know their neighbors by name
were just as likely to keep up with community events via a blog, SNS, or discussion group. Other than age, the Pew study found that there was little variation in social media use within the neighborhood setting. The community informatics literature shows the challenges and opportunities associated with using ICTs at the local level while the neighborhood organizing literature reveals the diversity of factors influencing why neighbors come together or not.

**Background and Case Study: Indian Hills Neighborhood**

Our case study concerns the Indian Hills neighborhood in Lawrence, Kansas in the USA and the Indian Hills Neighborhood Association (IHNA) (see Figure 1, Table 1). Founded in 1854, Lawrence is the county seat and home to the University of Kansas and Haskell Indian Nations University. The neighborhood was an early expansion of the city in the 1950s (Indian Hills Neighborhood Association, 2003a) and is predominantly single-family homes with some duplexes and fourplexes (see Figure 2). Not all homes have access to an adjacent sidewalk. An elementary school and middle school are across Louisiana Street from the neighborhood to the east. There are two grocery stores, a hardware store, and other commercial businesses within walking distance to the north on 23rd Street. To the west is a linear park, Naismith Valley Park, with a walking and bicycling trail and across Louisiana Street, next to the schools, is Broken Arrow Park.

In 1968, residents next to Naismith Valley Creek off Arkansas Street organized to protest the construction of an apartment complex in the Naismith Valley floodplain. This group of neighbors expanded and officially became the Indian Hills Neighborhood Association in 1974 (Indian Hills Neighborhood Association, 1985). Over the years, IHNA hosted meetings, potlucks, and a night of luminaries (candles in paper bags displayed along the streets of the neighborhood). Neighbors routinely displayed the luminaries the Sunday before Christmas and IHNA supplied the paper sacks and sand (to hold the candles in the bags). This event began in 1984 (Indian Hills Neighborhood Association, 2003a) on Arkansas Street and grew to include the whole neighborhood with approximately 6,000 sacks distributed (Indian Hills Neighborhood Association, 1996). However, this tradition ended in 2008 when IHNA members decided there were not enough participants. IHNA hosted the last annual fall meeting for election of officers in 2010 with 28 attendees. After the 2010 meeting, there were not enough volunteers to plan meetings, hold elections, or publish and fund newsletters. In the past, IHNA sent newsletters via postal mail to 550 households and as late as 2003 had 150 dues paying members (Indian Hills Neighborhood Association, 2003b). Today, the neighborhood itself is stable although current concerns are sidewalk conditions, traffic volumes, the construction of a major trafficway to the south, and intense commercial uses nearby. After seeing participation rates dwindle and being unable to muster volunteers, in February of 2012, the remaining IHNA officers and committee members (five residents) met to determine whether the organization should disband. At that meeting, an officer (one of the authors of this article) proposed an ‘experiment’ to see if social media could help. The committee voted to try social media as a means of reviving the organization, communicating
with members, and hopefully interesting a new generation in neighborhood involvement.

On 6 May 2012, the Facebook page and Twitter account went live and remain online. The Facebook page utilizes the standard Facebook page template. It has basic information about IHNA, a photo of the entry sign to the Indian Hills subdivision, and a map of the neighborhood. In July, August, and September of 2012, more photos from the 2010 IHNA Fall meeting/potluck and neighborhood involvement.
history were added. On 11 May 2012, emails were sent to the 16 residents on the IHNA email list (all the email addresses the IHNA had) inviting them to ‘like’ the Facebook page and/or to ‘follow’ IHNA on Twitter. This email generated three ‘likes’ on Facebook and two Twitter followers. Between 13 and 16 May, 550 doorhangers (printed cards with a hole for hanging on doorknobs) were delivered asking neighbors to ‘like’ the IHNA Facebook page, ‘follow’ IHNA on Twitter, or sign up for the IHNA email list. The doorhanger also announced the annual

TABLE 1. Demographic comparison city of Lawrence and Indian Hills, 2010 US Census Data plus survey respondents

<table>
<thead>
<tr>
<th></th>
<th>Lawrence</th>
<th>Indian Hills</th>
<th>Indian Hills survey respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>87,643</td>
<td>1,527</td>
<td>212a</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 18</td>
<td>18%</td>
<td>23%</td>
<td>–</td>
</tr>
<tr>
<td>18–64</td>
<td>75%</td>
<td>63%</td>
<td>63%</td>
</tr>
<tr>
<td>65 or over</td>
<td>8%</td>
<td>15%</td>
<td>37%</td>
</tr>
<tr>
<td>Mean age of respondents</td>
<td></td>
<td></td>
<td>58</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian, Alaskan Native, Native Hawaiian, Pacific Islander</td>
<td>3%</td>
<td>3%</td>
<td>1%b</td>
</tr>
<tr>
<td>Asian</td>
<td>5%</td>
<td>1%</td>
<td>.5%</td>
</tr>
<tr>
<td>African American</td>
<td>5%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Some other race</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>4%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>White</td>
<td>82%</td>
<td>85%</td>
<td>97%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>6%</td>
<td>5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Educational Attainment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population 25 years and over</td>
<td>53%</td>
<td>NA</td>
<td>70%</td>
</tr>
<tr>
<td>University Bachelor’s degree or above</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>34,970</td>
<td>629</td>
<td>212</td>
</tr>
<tr>
<td>Average Household Size</td>
<td>2.28</td>
<td>2.43</td>
<td>2.22</td>
</tr>
<tr>
<td>Owner Occupied Units</td>
<td>47%</td>
<td>69%</td>
<td>96%</td>
</tr>
<tr>
<td>Renter Occupied Units</td>
<td>53%</td>
<td>31%</td>
<td>4%</td>
</tr>
<tr>
<td>Incomec</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US$34,999 or less</td>
<td>42%</td>
<td>NA</td>
<td>8%</td>
</tr>
<tr>
<td>US$35,000–US$49,999</td>
<td>15%</td>
<td>NA</td>
<td>22%</td>
</tr>
<tr>
<td>US$50,000–US$74,999</td>
<td>17%</td>
<td>NA</td>
<td>20%</td>
</tr>
<tr>
<td>US$75,000–US$99,999</td>
<td>11%</td>
<td>NA</td>
<td>24%</td>
</tr>
<tr>
<td>US$100,000 or more</td>
<td>16%</td>
<td>NA</td>
<td>26%</td>
</tr>
</tbody>
</table>

Notes: Percentages may not equal 100 due to rounding. NA, Not available. The US Census does not collect sensitive information like income at the neighborhood level

a212 surveys were returned representing 212 households and a population of 471 people. Respondents were asked how many people lived in their households

bIn the survey, the racial categories did not match those in the US Census exactly. ‘Asian or Pacific Islander’ at .5% was one category and ‘Native American’ at 1% was another so they are not exactly comparable to the US Census categories used in the table

cIn terms of age and income, the city of Lawrence is young and has lower incomes because of the large university student populations. Unlike the US Census, the survey used US$30,000 for the one income category cut off. All the others from the survey are the same categories used by the US Census

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Neighborhood Garage Sale Day. The doorhangers generated two more ‘likes’ on Facebook, one additional Twitter follower, and two requests to be added to the email list. Twenty-three houses participated in the annual garage sale day. In January of 2013, we sent by postal mail a survey to residents to assess why the

Figure 2. Map of Indian Hills Neighborhood (Created by Jonathan M. Curth).
social media outreach had not been more effective. Immediately after the survey went out, three additional residents ‘liked’ the Facebook page, but the Twitter feed gained no new followers in that time period.

Methods

A questionnaire with a self-addressed stamped envelope was mailed to 573 households within the IHNA boundaries on 24 January 2013 (IHNA’s mailing list was of 550 households but a review of area addresses for the survey revealed 573). Three were returned because the dwellings were vacant. To help boost return rates, we mailed a postcard on 3 January 2013 letting residents know a survey was coming (Dillman, 2000). Out of 570 valid addresses, residents returned 212 surveys for a return rate of 37%, which is a very strong indication of what is going on in the neighborhood, but one cannot exclude the possibility of some selection bias in the results. The survey questions asked respondents about demographic information, sense of community, neighborhood name and boundaries, neighborhood issues, involvement in a neighborhood association, and how they would prefer to communicate (or not) with the neighborhood. The survey used and modified questions from previous studies on neighborhood organizations and sense of community as outlined in the earlier neighborhood organizing literature review (Glynn, 1981; Chavis & Wandersman, 1990; Saguaro Seminar, 2000; Martinez et al., 2002; Perkins & Long, 2002; Sigmon et al., 2002; Hampton et al., 2011; Coulton et al., 2012). Surveys were anonymous unless the person indicated that we could contact him or her for a future interview.

Because our study examines neighborhood organizing and social media communication, the transactional framework Hesse et al. (1988) proposed to study computer-mediated communication is used. Hesse et al. (1988, p. 148) noted ‘interaction cannot be understood—nor can problems be remediated—except as a confluence of people, context, and temporal qualities.’ ‘Time’ incorporates the length, intervals, and sequencing of events and relationships. ‘Person’ can include personal, psychological, and demographic characteristics. Lastly, ‘environment’ includes social and physical environments (Hesse et al., 1988). For this study, in the regression models and the content analysis, we not only measure ‘time’ as in length of continued residency, but we also examine the time costs and benefits of social media to users and organizers. In addition, demographic information along with personal attitudes toward the neighborhood and different communication methods are incorporated. The social, physical, and political environment of the neighborhood including access to sidewalks, identifying neighborhood boundaries, knowing neighbors, and opinions about city government are explored as well. Using the Hesse et al. (1988) framework, regression models were created to examine which factors seem to be affecting whether people think the neighborhood should have a neighborhood association or not. The dependent variable uses responses to the survey item ‘My neighborhood should have a neighborhood organization’ with agreement measured on a scale from 1 to 5 with 1 being ‘Strongly Disagree’ and 5 ‘Strongly Agree’. Because the dependent variable is an ordinal measure, the type of regression used here is maximum-likelihood ordered logit estimation (ordered logistic regression). We chose the
independent variables (controlling for other explanations for a lack of interest in the neighborhood association) based on the literature review and the Hesse et al. (1988) framework (see Table 2).

To help understand the regression results and provide further insight into the use of social media for neighborhood communication, responses to the open-ended survey question, ‘Do you think Facebook and/or Twitter are good ways to communicate with the neighborhood? Why/why not?’ were examined. The analysis consists of open and axial coding of the responses from which key themes were identified and used to analyze the data (Strauss & Corbin, 1990; Cresswell, 2007). This analysis also uses the Hesse et al. (1988) framework’s categories of time, environment, and person.

Results
In addition to the demographics information in Table 1, below are more details about those who answered the survey. Fifty-nine percent were employed and 30% were retired (n = 211). Length of residency goes from a few months to 55 years (mean of 19 years and standard deviation of 15, n = 211). 86% (n = 212) spend an hour or more on the Internet or email (outside of work) in a typical week. In addition, the survey asked people to pick the three best ways for ‘the neighborhood to communicate with you.’ The choices and percentages are: Mail (postal mail) (69%, n = 212), Email (51%), Doorhangers (41%), Telephone (25%), Facebook (20%), Word of mouth (19%), Website (14%), Google + (3%), Twitter (1%), Blog (1%), Mobile App (1%), MySpace (0%), and LinkedIn (0%). When asked if they knew that IHNA had a Facebook page and Twitter feed, only 9% (n = 208) and 3% (n = 191) respectively said ‘yes’.

Regression Models
The ordered logistic regression model was run with variables covering different aspects of time, environment, and personal characteristics leaving out any communication variables at first (Model 1) and then adding them in one by one (Table 3). The pseudo-$R^2$ for Model 1 was 0.19 and three variables were significant and positively increased the likelihood of more strongly agreeing with the statement that the neighborhood should have a neighborhood organization (Neighborhood Efficacy, Trust IHNA, and Neighborhood Does Well). An assumption of an ordered logistic regression is that the relationship between the pairs of outcome groups is the same (proportional odds assumption). A likelihood ratio test showed this assumption was not violated ($\chi^2 (3) = 4.06, p = 0.26$). In this first model, it indicates that neither of the time variables is significant. The more physical, environmental characteristics of sidewalks and perceived size of neighborhood boundaries were not significant either. However, environmental characteristics related to efficacy (agreeing that people in the neighborhood could organize if a serious problem occurred) and trusting the current neighborhood association (IHNA) are significant. One of the personal characteristics is the most important in terms of increasing the likelihood of higher agreement with the statement about having a neighborhood association. For
<table>
<thead>
<tr>
<th>Variable</th>
<th>Survey item</th>
<th>Range</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood organization</td>
<td>My neighborhood should have a neighborhood organization&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1–5</td>
<td>3.73</td>
<td>.92</td>
</tr>
<tr>
<td>Time</td>
<td>Do you expect to be in this residence for at least 5 more years? 1 = No, 2 = Don’t know, 3 = Yes In what year were you born? (converted to age)</td>
<td>1–3</td>
<td>2.39</td>
<td>.80</td>
</tr>
<tr>
<td>Age</td>
<td>20–91 55 16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Is there a sidewalk in front of your house? 1 = Yes, 0 = No</td>
<td>0–1</td>
<td>.36</td>
<td>.481</td>
</tr>
<tr>
<td>Neighborhood boundaries</td>
<td>What area do you define as your neighborhood? 1 = the 2 or 3 houses immediately adjacent to my house, 2 = The 5 to 10 houses next to my house and immediately across the street, 3 = The 20 or so houses on my street and nearby streets, 4 = The houses within the Indian Hills Neighborhood Association area, 5 = The houses in the Broken Arrow Elementary School area.</td>
<td>1–5</td>
<td>3.42</td>
<td>1.13</td>
</tr>
<tr>
<td>Trust City of Lawrence</td>
<td>The City of Lawrence government is run for the benefit of all the people&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1–5</td>
<td>2.90</td>
<td>1.12</td>
</tr>
<tr>
<td>Issues</td>
<td>There are no serious issues in the neighborhood&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1–5</td>
<td>3.21</td>
<td>1.04</td>
</tr>
<tr>
<td>Neighborhood efficacy</td>
<td>If there was a serious problem in this neighborhood, the people here could get together and solve it&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1–5</td>
<td>3.38</td>
<td>.79</td>
</tr>
<tr>
<td>Trust IHNA</td>
<td>I can trust the IHNA to do what is right&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1–5</td>
<td>3.34</td>
<td>.80</td>
</tr>
<tr>
<td>Person</td>
<td>It is important to me that my neighborhood do well.</td>
<td>1–5</td>
<td>4.24</td>
<td>.73</td>
</tr>
<tr>
<td>Neighborly relationships</td>
<td>Think about the people who live on your block or cul-de-sac. How many people do you have a neighborly relationship with (can borrow a tool, watch each other’s houses when away)? 1 = None to 5 = Almost everyone</td>
<td>1–5</td>
<td>2.97</td>
<td>1.17</td>
</tr>
<tr>
<td>Income</td>
<td>If you added together the yearly incomes, before taxes, of all the members of your household for last year what would the total be? 1 = Less than US$30,000, 2 = US$30,000 but less than US$50,000, 3 = US$50,000 but less than US$75,000, 4 = US$75,000 but less than US$100,000, 5 = US$100,000 or more</td>
<td>1–5</td>
<td>3.49</td>
<td>1.28</td>
</tr>
<tr>
<td>Social media chosen</td>
<td>Check the three best ways for the neighborhood to communicate with you. 1 = Facebook and/or Google + and/or Twitter chosen, 0 = Other option combinations</td>
<td>0–1</td>
<td>.28</td>
<td>.45</td>
</tr>
<tr>
<td>Email chosen</td>
<td>Check the three best ways for the neighborhood to communicate with you. 1 = Email chosen but not social media (Facebook, Google +, Twitter), 0 = Other option combinations</td>
<td>0–1</td>
<td>.38</td>
<td>.49</td>
</tr>
<tr>
<td>Mail chosen</td>
<td>Check the three best ways for the neighborhood to communicate with you. 1 = Mail chosen but not social media (Facebook, Google +, Twitter) or email, 0 = Other option combinations</td>
<td>0–1</td>
<td>.24</td>
<td>.43</td>
</tr>
</tbody>
</table>

<sup>a</sup>Answer options: 1 to 5 with 1 = Strongly Disagree, 3 = Neither Agree nor Disagree, 5 = Strongly Agree n = 151
### Table 3. Ordered logistic regression of neighborhood organization measure on selected measures related to time, environment, and person characteristics by communication preferences

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2 Social Media</th>
<th>Model 3 Email</th>
<th>Model 4 Postal Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Standard error</td>
<td>Coefficient</td>
<td>Standard error</td>
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<tr>
<td><strong>Time</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Continued residency</td>
<td>-.022 .224</td>
<td>-.057 .225</td>
<td>-.019 .226</td>
<td>-.033 .225</td>
</tr>
<tr>
<td>Age</td>
<td>-.010 .013</td>
<td>-.004 .013</td>
<td>-.010 .013</td>
<td>-.008 .013</td>
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<tr>
<td><strong>Environment</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidewalk</td>
<td>-.214 .340</td>
<td>-.198 .341</td>
<td>-.212 .341</td>
<td>-.220 .342</td>
</tr>
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<td>.019 .147</td>
<td>.039 .147</td>
<td>.013 .149</td>
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<td>.083 .160</td>
<td>.114 .159</td>
<td>.036 .164</td>
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<tr>
<td>Issues</td>
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<td>-.177 .175</td>
<td>-.181 .173</td>
<td>-.112 .176</td>
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<td>Neighborhood efficacy</td>
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<td>.562** .245</td>
<td>.598** .245</td>
<td>.565** .246</td>
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<td>Trust IHNA</td>
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<td>.652** .249</td>
<td>.652** .248</td>
<td>.630** .249</td>
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<td>Neighborhood does well</td>
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<td>1.433*** .275</td>
<td>1.41*** .272</td>
<td>1.536*** .278</td>
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<td>.033 .152</td>
<td>.053 .151</td>
<td>.029 .153</td>
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<tr>
<td>Income</td>
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<td>.203 .139</td>
<td>.195 .139</td>
<td>.196 .140</td>
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<td>Social media chosen</td>
<td>- - .721*</td>
<td>.381</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>Email chosen</td>
<td>- - - .036</td>
<td>.342</td>
<td>- -</td>
<td>- -</td>
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<td>Postal mail chosen</td>
<td>- - - -</td>
<td>- -</td>
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<td><strong>Pseudo-R^2</strong></td>
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<td>0.19</td>
<td>0.21</td>
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<td><strong>Prob &gt; χ^2</strong></td>
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<td>LR χ^2 (11)</td>
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<td>n</td>
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***p < 0.001, **p < 0.05, *p < 0.06
example, if agreement with the statement, ‘It is important to me that my neighborhood do well,’ went up by 1, there would be an expected 1.4 increase in the log odds of agreement on the variable indicating it is important that the neighborhood have a neighborhood association, when all other variables in the model are held constant.

The same model was rerun three times inserting a different type of neighborhood communication each time (Social Media, Email, and then Postal Mail). They are entered separately so the comparison group for each is all other communication types (Table 3). In Model 2, the Social Media variable represents those who chose Facebook and/or Twitter and/or Google + as one of the best ways for the ‘neighborhood to communicate with you’ versus those who did not choose one of those options. The pseudo-$R^2$ increased to .20 and the three variables from Model 1 and the Social Media variable were positive and significant. A one-unit increase in Social Media (going from 0 to 1) increases the log odds of being in greater agreement with having a neighborhood association by 0.72. Model 3 indicates that when Social Media is removed and replaced with Email as a preferred type of communication, the pseudo-$R^2$ returns to .19 and all three of the same variables from the first model are significant and positive but the Email variable is not significant. The Email variable represents those respondents who chose email (but not any of the social media options) as a way for the neighborhood to communicate with them. Lastly, Model 4 included Postal Mail as a preferred communication type. The pseudo-$R^2$ increased to .21 and all of the same variables are significant and positive but the Postal Mail variable is significant and negative (log odds $-1.03$) indicating that those who chose the postal mail option decreased the odds of agreement with the statement that ‘My neighborhood should have a neighborhood organization.’ The Postal Mail variable consists of those who chose ‘mail’ from the list of options but not email or any of the social media choices. For all of these models, a likelihood ratio test was performed and none of them violated the proportional odds assumption.

Content Analysis

Overall, the responses to the open-ended survey question, ‘Do you think Facebook and/or Twitter are good ways to communicate with the neighborhood? Why/why not?’ were coded into four categories: No (41%), Yes (25%), Maybe (13%), No response (17%), and Don’t know/not sure (4%), ($n = 177$). To understand these percentages and illuminate the regression results, below is further analyses of the written responses placed within the transactional framework (time, environment, and person) (Hesse et al., 1988).

In terms of ‘time’, some respondents considered social media to be a meaningful way to communicate and their comments are included here in quotes. Related to time saved by leaders and residents, people who said yes without qualification noted that social media were convenient, cost effective, and ‘easy’ ways to stay connected and allowed for ‘instant’ or ‘immediate’ communication. Yet, residents also voiced complaints about using social media in general and it being a waste of time or intrusive. A few respondents mentioned that they were already ‘super saturated’ or overwhelmed with Facebook pages and requests.
In this vein, one resident mentioned that: ‘Maybe—only if important updates are posted. If I were to get constant emails about posts/updates I would probably not take them seriously . . . ’.

Common reasons given for avoiding social media for neighborhood communication were factors associated with ‘environment’, such as, the perceived large size of the neighborhood and not knowing many residents. A few residents noted that they only use social media, such as Facebook, to communicate with people they already knew or already had ties with. These residents noted that the Indian Hills neighborhood did not feel like a close-knit group, therefore they would not want to use Facebook for neighborhood communication. Some residents noted that they do use Facebook to communicate with neighbors that are already friends.

A few participants mentioned that social media was a tool to communicate with people in geographically distant locations and not those who lived nearby. Several participants shared this perspective regarding social media: ‘Not really, because “neighborhood” is so associated w/ physical space’; ‘Use facebook to contact so many others who live far away or that one might never/rarely see or talk to if not for facebook. Neighborhoods should have in-person contact or fun events to attend for people to get to know one another’. The collocation of people within the neighborhood was read as a reason to support analog forms of communication that required walking around the neighborhood and face-to-face interaction. Another resident noted: ‘Yes & No. As a small geographical area, flyers would be more effective at reaching people who don’t already know the other people in the area, or who don’t have access to the internet.’

Relating to the ‘environment’ in which social media is used, a rather sizable category of respondents noted social media could be potentially beneficial if used under the proper conditions. Respondents cautioned that if the neighborhood association used Facebook or Twitter to communicate then it would have to be done ‘correctly’, meaning that it would have to be regularly updated, full of interesting and relevant content, have a base of active, invested participants, and ‘season it with an occasional dash of indesputable (sic) humor.’

The majority of responses to the open-ended question voiced hesitancy about, or preferred not to use, social media for neighborhood communication due to issues related to the ‘person’. Several respondents mentioned unequal access to social media and the exclusion of some people from neighborhood communication as key reasons to avoid services like Facebook and Twitter. This trope of exclusion, inequality, and ‘convenient for some but not all’ was reiterated citing many different factors: lack of digital skills, lack of social media skills specifically, or lack of access to a computer and the Internet. Aside from digital literacy and/or access, others pointed out that some simply may not be interested in using or prefer not to use SNSs. Several respondents mentioned that social media within the neighborhood might be a good supplemental source of information, but would be insufficient if SNSs were the primary form of communication. This comment is an example: ‘I don’t rely on electronic contacts—they are only effective if everyone can and will use them. Those who don’t (-) don’t communicate if that is the only option.’ The most common hesitation or complaint about unequal access to social media for neighborhood communication was
articulated through a discussion of age and health. Residents identified themselves as old, retired, or ill and offered these conditions as reasons for not using computers, the Internet, or social media and for preferring analog communication. The mean age of the ‘Yes’ respondents to the open-ended question about using Facebook and Twitter to communicate with the neighborhood was 50, the ‘No’ respondents’ mean age was 63 while the ‘Maybe’s’ and ‘Don’t knows’ were 56 and 72 respectively.

Discussion

This study shows that the respondents choosing social media as a preferred method of communication are the ones most interested in having a neighborhood association; more so than those who prefer other, more traditional, means of neighborhood communication (Email or postal mail). Of particular note are those who chose Postal Mail as a preferred means of neighborhood communication. The regression results indicate that this group is least interested in having a neighborhood association when compared to those choosing email or social media. The IHNA should think twice about using precious dollars to purchase a costly form of communication (postal mail) to reach those who are not that interested in a neighborhood organization anyway. Yet, as previous researchers have explained, those seeking to use social media to connect with place-based communities need to be aware of the limitations of ICTs and rely on multiple means of communication to ensure that the majority of neighborhood residents are included (Johnson & Halegoua, 2013). The results of this study indicate that multiple communication methods are still a good idea but targeting residents via social media might be a good starting point for resource poor organizations. In addition, the regression results show that continued residency (time), condition of the neighborhood (sidewalk, issues: environment) were not as important to the future of the neighborhood association as relationships (neighborhood efficacy, trusting current neighborhood association: environment) and personal characteristics, such as, caring about the neighborhood and communication preferences.

In addition to targeting resources and communication methods to the most receptive audiences, the responses to the open-ended question provide further clarity regarding the opportunities and limitations of social media. Other than general complaints about a lack of skills or access and personal preferences against using social media, we found three main categories of comments explaining the lack of social media use within the community: a mismatch between neighborly ties and the more intimate ties associated with friends on social media, desires for an inclusive or representative neighborhood organization, and expectations regarding face-to-face communication within a neighborhood.

Neighborhoods can take on a variety of roles: mutual aid, social, political, and status (Warren, 1977) and it appears that social media use may be more or less compatible with each role. How sociable people want or think the neighborhood is shows in the discomfort some had with Facebook for neighborhood communication. Propinquity does not, by itself, create a tie strong enough for access to online profiles that display personal information (Wellman, 1988). In addition, our findings show that there is a perception that neighborhood
communication should be inclusive. Due to the political role of neighborhood associations, a neighborhood organization that relies on social media alone not only risks exacerbating digital divides but also risks alienating those who would feel like the organization was being undemocratic. However, this idea of inclusiveness might also be related to the social and status roles of a neighborhood association and fears people might have about being ‘left out’. Last, respondents returned to the idea that neighborhoods should rely on face-to-face meetings and assumed or worried that the use of social media would preclude this sort of contact. Arnold et al. (2003) noted that in their study of a neighborhood intranet, ironically, residents tended to frequent face-to-face events about the development of online forums more frequently than the online forums.

Several urban planners and scholars have found success in social media and digital practices (like gaming) for participatory planning, community input, publicity, and education (Evans-Cowley, 2010; Gordon & Manosevitch, 2010; Gordon et al., 2011; Fredericks & Foth, 2012). However, using social media with community-wide planning issues based around an event or debate are different from coordinating communication and contact within a particular neighborhood. The former situation hails individuals as residents and citizens and requests their input in formal processes; the latter hails individuals on a more intimate, personal level, as a neighbor, and asks people to connect with others informally. It makes sense that there would be some resistance in the latter example or concerns about whether Facebook and Twitter are the most appropriate platforms to communicate with neighbors.

Drawing on findings from planning and community informatics literatures and results from this study, we list advice for the IHNA, other neighborhood organizations, and those seeking to communicate with neighborhoods, such as, planners below. The advice is divided into categories based on the framework of time, environment, and person used earlier.

In regard to the component ‘time’, the advice is as follows:

- Low-resource neighborhood organizations may want to start with social media (low time, low cost) and build from there. Once connections are made, volunteers recruited, and resources begin to accumulate, then moving out to more expensive means of communication can occur. Social media, email, postal mail, signs and postings, word-of-mouth, newsletters, and doorhangers can be part of a routinized communication structure and can be used to create synergy between online and offline connections.

- If social media is used, it should not waste neighbors’ time with superfluous postings. Perhaps the neighborhood association or planners attempting to communicate with neighborhoods could pledge to residents that postings will be few, pertinent, but also humorous on occasion.

Under the ‘environment’ category, which also includes social context, the suggestions are:

- Particularly for a politically oriented neighborhood, be aware of the need to be representative and use multiple forms of communication to reach everyone.
Neighborhood residents who do not use social media, as well as those who do, tend to regard social media as an exclusive means of communication within the neighborhood context.

- Particularly for a socially oriented neighborhood, do not wait until social ties are so depleted that using a convenient form of communication like social media does not mesh with the neighborhood context and sociality.
- Email addresses are key to having a low cost, convenient means of communication and are key to branching out to social media. Organizations should not wait until their neighborhood ties are so low that they no longer have valid email addresses.
- Neighborhood organizations with larger boundaries may find social media useful for holding larger areas together where people in the same neighborhood do not see each other on the same block or street. However, these residents might prefer an alternative to Facebook with minimal sharing of their personal information and social networks.

When looking to the right fit between the ‘person’ and social media communication, keep in mind the following:

- Those preferring social media may be few but mighty as they may be the ones most interested in a neighborhood association, neighborhood planning issues and events, and willing to create social ties within their neighborhood. Postal mail is not only expensive, but may not reach the most interested neighbors.
- Foster feelings of ownership of social media networks by asking participants to help manage the page, supply content, or invite interaction and feedback.
- Social ties are also important to being able to reach out to neighbors to provide training in the use of email or social media.
- Social media users tend to be younger with children, which will mean accommodating children in neighborhood activities and being sensitive to work/time commitments.
- Some social media users are hesitant about using platforms like Facebook and Twitter for neighborhood communication due to the lack of preexisting social ties.

This set of advice is similar to that which has been proposed in regard to using multiple forms of communication, but this advice goes further to help neighborhood organizations and planners prioritize resources and reach the most interested neighbors first and build from there.

There are limitations to this study. The findings are only from one neighborhood. It is for future research to survey other neighborhoods and look for nuances. A 37% return rate for this survey is a very strong indication of what is going on in the neighborhood, but one cannot exclude the possibility of some selection bias in the results. Due to the small sample size and highly correlated variables, the number of variables that could be entered into the regression models at one time was limited. In the open-ended question about whether people thought Facebook and Twitter were good ways to communicate with the neighborhood, we left ‘neighborhood’ open to interpretation and did not specify the neighborhood.
association. In the future, we hope to survey other neighborhoods and neighborhood associations about their use of social media and other forms of communication, and to interview IHNA residents in order to delve deeper into participation rates and communication preferences.

Conclusion

There is potential for the use of social media in a neighborhood context, but as other researchers have found, that potential is contingent. With this study, we have further defined those contingencies and clarified how neighborhood organizations and planners can be strategic about their social media use. While writing this paper, one of the authors responded to a question on the IHNA Facebook page. The resident was inquiring about the date of the annual neighborhood garage sale. The response said that the garage sale day was up in the air and dependent on getting people to set it up and advertise it. The resident was asked if she would like to help. She messaged back, ‘Ok thanks. I will try to help out if possible’ and later on she delivered doorhangers announcing the garage sale day. This exchange on the IHNA Facebook page demonstrates the potential to turn online ties into offline connections. It is important to recognize that bringing offline and online communication methods, information grounds, and experiences together will be key to rebuilding the IHNA. Perhaps starting with social media users will breathe new life into a 38-year-old organization. Although Indian Hills residents were hesitant about joining the social media networks set up by the IHNA, our preliminary findings on populations who would like to use social media to communicate with neighbors point to a concrete source of potential neighborhood organization members and provides information on how better to tailor digital media use to the neighborhood context.

What happens when a failing neighborhood organization tries to revive itself using social media and under what conditions is social media helpful for neighborhood re-engagement? We learned that residents preferring social media as a means of neighborhood communication were the most likely to want a neighborhood association. It is a common strategy in any new venture to start with ‘easy wins’ and the social media people would be a good place for a struggling neighborhood association or new planning effort to start. If the neighborhood association or the planners can encourage this group to connect via social media then they will have an easy, low-cost way of reaching those most interested in neighborhood organizing. It is possible that these neighbors would be willing to serve as administrators or even trainers for neighborhood social media or other online networking tools. Once this group is involved, organizers and planners can move to other engagement strategies that involve volunteers, coming to meetings and events, and money (postage, copies). While interactions and information dissemination via social media might end up as a supplement to other forms of communication, face-to-face interactions, and events, it might prove to be a good way to ‘jumpstart’ a failing neighborhood association or city-neighborhood relationship. However, neighborhood associations and planners must be careful not to alienate those who see social media communication as exclusive, intrusive, or a time waster.
Disclosure statement

No potential conflict of interest was reported by the authors.

References

Arnold, M., Gibbs, M., & Wright, P. (2003) Intranets and local community: ‘Yes, an intranet is all very well, but do we still get free beer and a barbeque?’, in: M. Huysman, E. Wenger & V. Wulf (Eds) *Communities and Technologies*, pp. 185–204 (New York: Springer).


Indian Hills Neighborhood Association (1985) *History of Indian Hills* (Lawrence, KS: Indian Hills Neighborhood Association Archives).


Indian Hills Neighborhood Association (2003a) *Indian Hills Neighborhood Association Newsletter/Luminaria Reminder* (Lawrence, KS: Indian Hills Neighborhood Association Archives).

Indian Hills Neighborhood Association (2003b) *Indian Hills Neighborhood Association Brochure* (Lawrence, KS: Indian Hills Neighborhood Archives).


