Routledge
Taylor & Francis Group

Journal of International and Intercultural Communication

ISSN: 1751-3057 (Print) 1751-3065 (Online) Journal homepage: http://www.tandfonline.com/loi/rjii20

Bridging mechanisms in multiethnic communities: Place-based communication, neighborhood belonging, and intergroup relations

Wenlin Liu, Minhee Son, Andrea Wenzel, Zheng An, Nan Zhao Martin, Seungahn Nah & Sandra Ball-Rokeach

To cite this article: Wenlin Liu, Minhee Son, Andrea Wenzel, Zheng An, Nan Zhao Martin, Seungahn Nah & Sandra Ball-Rokeach (2017): Bridging mechanisms in multiethnic communities: Place-based communication, neighborhood belonging, and intergroup relations, Journal of International and Intercultural Communication, DOI: 10.1080/17513057.2017.1384506

To link to this article: http://dx.doi.org/10.1080/17513057.2017.1384506

Published online: 05 Oct 2017.

Submit your article to this journal

View related articles

View Crossmark data

Full Terms & Conditions of access and use can be found at
http://www.tandfonline.com/action/journalInformation?journalCode=rjii20

Download by: [University of Houston] **Date:** 05 October 2017, At: 06:03

JOURNAL OF INTERNATIONAL AND INTERCULTURAL COMMUNICATION, 2017
https://doi.org/10.1080/17513057.2017.1384506

Check for updates

Bridging mechanisms in multiethnic communities: Place-based communication, neighborhood belonging, and intergroup relations

Wenlin Liu[a], Minhee Son[b], Andrea Wenzel[c], Zheng An[d], Nan Zhao Martin[e], Seungahn Nah[f] and Sandra Ball-Rokeach[b]

[a]Jack J. Valenti School of Communication, University of Houston, Houston, TX, USA; [b]Annenberg School for Communication and Journalism, University of Southern California, Los Angeles, CA, USA; [c]Klein College of Media and Communication, Temple University, Philadelphia, PA, USA; [d]Communication Department, University of Hawaii at Hilo, Hilo, HI, USA; [e]Department of Public Health, California State University, Los Angeles, CA, USA; [f]School of Journalism and Communication, University of Oregon, Eugene, OR, USA

ABSTRACT

Using communication infrastructure theory (CIT), this study examines how place-based communication, including neighborhood interpersonal discussion, geo-ethnic media, and local organizations, may have the potential to promote multiethnic intergroup relations through forging a sense of neighborhood belonging. Based on survey data consisting of 405 diverse community members, this study employs structural equation modeling to test the relationships among residents' connection to place-based communication, their level of neighborhood belonging, out-group contact frequency, and perceived interaction quality across six interethnic dyads. Findings suggest that place-based communication does impact multiethnic intergroup interaction, but the direction and magnitude of such effects diverge along ethnic lines.

ARTICLE HISTORY
Received 10 October 2016
Accepted 18 September 2017

KEYWORDS
Multiethnic intergroup relations; place-based communication; neighborhood belonging; communication infrastructure theory; multiethnic community

Downloaded by [University of Houston] at 06:03 05 October 2017

The twenty-first century is characterized by the global trend of population migration (Massey, 2010). Like many places around the world, urban communities in the United States have experienced a rapid influx of immigrants over the past few decades. From 2000 to 2011, the U.S. foreign-born population has increased by 29.7%, and the top emigrating countries include Mexico, India, and China (Pew Hispanic Center, 2013). As demographers predict minorities to become the majority over the next 30 years (Reese-Cassal, 2014), fewer urban places are "monochromatically divided by Blacks and Whites" (Oliver & Wong, 2003, p. 567). Against this backdrop, it becomes increasingly common for residents from diverse racial, cultural, and linguistic backgrounds to live in the same residential area (Chen et al., 2013; Schubert, Weibert, & Wulf, 2011).

While enriching neighborhood culture, residential diversity has also been found to pose major challenges to neighborhood cohesion (Greif, 2009). For example, competition for limited resources (e.g., jobs and housing) may fuel group-based hostility and conflict (Johnson & Oliver, 1989). Brought by immigration and population diversity, the

CONTACT Wenlin Liu wliu16@uh.edu University of Houston, 3347 Cullen Blvd, Houston, Texas, 77204, USA
© 2017 National Communication Association

increasingly complex intergroup relations require greater understanding of how and through what mechanisms residents of diverse backgrounds can forge convivial relationships and communities become integrated (Georgiou, 2013). These questions have implications for twenty-first century communities, where multiethnic cohabitation will increasingly be a feature of life not only in metropolitan cities, but also medium and small-sized communities.

To understand how communication mechanisms grounded in everyday neighborhood context may serve as a "bridging" mechanism connecting diverse residents, this paper heeds the call for greater research on the nature and context of intergroup contact (e.g., Dovidio, Gaertner, & Kawakami, 2003; Pettigrew, Tropp, Wagner, & Christ, 2011) by focusing on neighborhood-level intergroup processes. Broad, Gonzalez, and Ball-Rokeach (2014) discovered that place-based communication, defined as a network of communication storytelling about the local community by residents, local media, and community-based organizations, contributed to a sense of neighborhood belonging and the quality of African-Latino intergroup relations in South Los Angeles. Building on this line of work, the current study combines communication infrastructure theory (Ball-Rokeach, Kim, & Matei, 2001; Kim & Ball-Rokeach, 2006a & 2006b) and intergroup contact theory (Allport, 1954; Dovidio et al., 2003; Pettigrew & Tropp, 2006) to examine intergroup relations in a multiethnic urban community.

Extending the argument that place-based communication can facilitate "the (re)imagining of community" (Anderson, 1991, p. 48), we first empirically test the paths of influence among residents' connection to place-based communication, neighborhood belonging, and intergroup relations outcomes, using representative survey data collected from a residential community where three major ethnic populations reside. Furthermore, we compare and contrast how the same theoretical model may perform differently across the Anglo–Latino, Anglo–Asian, and Asian–Latino interethnic dyads.

Intergroup communication: Intergroup contact theory within a multiethnic context

Intergroup and intercultural communication research has been dedicated to examining factors that lead to increased frequency and improved quality of interaction across racial and ethnic boundaries (Allport, 1954; Binder et al., 2009; Dixon et al., 2010; Pettigrew, 2008; Pettigrew et al., 2011). Sufficient and positive intergroup communication has long been found to promote community integration and civic engagement (Ognyanova et al., 2013). Allport's (1954) seminal work, *The Nature of Prejudice*, argues that sustained interpersonal contact with out-group members helps breed familiarity, decrease prejudice, and promote positive attitudes towards out-group members. Intergroup contact theory emphasizes the utility of positive and person-to-person contact in reducing intergroup prejudice (Allport, 1954; Pettigrew, 2008; Pettigrew et al., 2011) and provides an important point of departure to study intergroup relations and community integration.

However, the mere presence of intergroup contact does not necessarily improve intergroup relations. For contact to enable positive relational change, scholars have proposed a number of prerequisite features regarding contact (Dovidio et al., 2003), such as the nature of contact situations, the presence of common goals, or the relative status of the two parties involved (Allport, 1954; Pettigrew, 2008). The context of intergroup contact, among

Downloaded by [University of Houston] at 06:03 05 October 2017

Downloaded by [University of Houston] at 06:03 05 October 2017

others, emerges as a particularly important mediating mechanism (Pettigrew et al., 2011). For example, Pettigrew and Tropp (2006) observed that intergroup contact embedded in a competitive context, such as in the workplace, tended to aggravate group-based prejudice. On the other hand, intergroup contact situated in residential context, especially in communities with a high level of residential integration, could be effective in promoting positive intergroup sentiments (Welch, Sigelman, Bledsoe, & Combs, 2001).

While intergroup contact in a residential place has the potential to forge positive intergroup relations (Welch et al., 2001), the emergence of multiethnic communities has complicated the process. First, intergroup interaction has evolved from bi-lateral to multilateral within a multiethnic community. That is, while earlier intergroup contact research focused predominantly on Black and White intergroup relations (Oliver & Wong, 2003), there is growing demand to study intergroup contact across multiple interethnic dyads, particularly between growing ethnic minorities such as Asian and Latino residents (Broad et al., 2014; Pettigrew, 2008). Second, with much of intergroup contact embedded in everyday communication, recent scholarship has shed light on the importance of local communication processes in shaping everyday intergroup relations (e.g., Broad et al., 2014; Nagda, 2006). In particular, research has found that residents' integration into the neighborhood storytelling network (STN), a communication network consisting of residents, local media, and community-based organizations, can significantly affect the frequency and quality of intergroup interactions (Broad et al., 2014).

In light of the above, the current paper takes a communication infrastructure theory approach (Ball-Rokeach et al., 2001; Kim & Ball-Rokeach, 2006a, 2006b) to understand how multiethnic intergroup contact is influenced by local communication processes, with neighborhood belonging proposed as a potential mediating mechanism.

Neighborhood belonging as a bridging mechanism

The residential neighborhood constitutes a vital site where individuals acquire resources, maintain social relations, and form a place-based collective identity (Ball-Rokeach et al., 2001; Pretty, Chipuer, & Bramston, 2003). Residents' attachment to the neighborhood can be viewed as a form of collective identity that emerges out of shared geographic space, analogous to other forms of identity based on ethnicity, culture, or lifestyle (Cohen, 1985).

Neighborhood belonging is the construct that indicates the degree to which residents form psychological bonds or physical attachments with the neighborhood. Often interchangeably referred as "neighborhood attachment" (Greif, 2009; Rothenbuhler, 1991), or "community ties" (Stamm, 1985), neighborhood belonging includes two distinct yet interrelated dimensions: an attitudinal dimension, which taps into individuals' subjective evaluation, feeling or "sentiment" towards the neighborhood; and a behavioral dimension usually manifested through individuals' everyday activities and community participation, such as exchanging favors with neighbors or participation in collective problem-solving (Ball-Rokeach et al., 2001; Greif, 2009). A strong sense of neighborhood belonging is observed to better enable coordinated action at the neighborhood level. For example, Brown, Perkins, and Brown (2003) find that place attachments and sense of community play a critical part in the success of collaborative neighborhood revitalization efforts.

In the context of a multiethnic community, the neighborhood referent, as opposed to a race or ethnicity-based referent, presents an alternative framework to the particularized interests of different racial and ethnic groups. Indeed, race or ethnicity-based organizing and activities may result in short-term changes to local conditions, especially in terms of serving the needs of a particular race or ethnic group (Uslaner & Conley, 2003). However, such types of organizing present a challenge to community-wide collective action (Manzo & Perkins, 2006) and to the likelihood of "imagining" the community together (Anderson, 1991, p. 48).

Individuals' sense of neighborhood belonging has the potential to promote better intergroup interaction in at least two ways. First, individuals' identification with the neighborhood can motivate greater community participation (Hays & Kogl, 2007). That is, the more individuals feel they belong to the place, the more they may become willing to participate in community affairs and interact with fellow residents. As the neighborhood is identified as the most immediate environment where frequent and largely positive intergroup contact happens (Pettigrew, 2008), a greater sense of investment in one's own neighborhood may manifest itself in conversations with neighbors, exchange of favors, and participation in neighborhood clubs. These activities, in turn, provide opportunities for residents to come into contact with out-group members of the community.

Second, neighborhood belonging may encourage positive interactions with out-group members through evoking a shared identity. The neighborhood is the common backdrop and the immediate space within which residents' everyday living takes place. As much of intergroup prejudice is derived from perceived "difference" and through in-group identity (Pettigrew, 2008), neighborhood belonging can serve to highlight "similarity" based on residents' shared sense of attachment to (or investment in) the neighborhood, which may potentially offset some of the distinctions based on race or ethnicity.

Because a sense of neighborhood belonging may create more opportunities for intergroup contact and evoke a shared identity, this study proposes the following two hypotheses:

H1: Residents' sense of neighborhood belonging is positively related to their frequency of contact with out-group members.

H2: Residents' sense of neighborhood belonging is positively related to their perceived quality of intergroup contact.

Place-based communication and intergroup relations

Communication has long been theorized to cultivate neighborhood belonging and facilitate community integration (Friedland, 2001; McLeod et al., 1996). The notion of "communicatively integrated community" posits that communicative and social linkages serve to bind the community through "structure, ecology, networks, civic solidarity, and symbolic communication" (Friedland, 2001, p. 368). Specifically, this line of scholarship focuses on a range of communication activities, from local media use to interpersonal networks, that enable individuals to develop psychological and relational attachment to the community (McLeod et al., 1996).

In the context of intergroup communication, however, not every form of communication is equally conducive to increased intergroup interaction. Here, we focus on

Downloaded by [University of Houston] at 06:03 05 October 2017

Downloaded by [University of Houston] at 06:03 05 October 2017

place-based, geographically bounded communication activities – that is, communication activities happening within the confines of a neighborhood community and/or about one's neighborhood (Kim & Ball-Rokeach, 2006a). When communication activities are place-based, they are more likely to serve as instrumental resources for individuals to achieve everyday goals such as engaging in civic life (Kim & Ball-Rokeach, 2006a, 2006b; McLeod, Scheufele, & Moy, 1999), acquiring health-related knowledge (Kim, Moran, Wilkin, & Ball-Rokeach, 2011; Matsaganis & Wilkin, 2015), and in other activity domains.

Communication infrastructure theory (Ball-Rokeach et al., 2001; Kim & Ball-Rokeach, 2006a), an ecological framework that emphasizes a community's communication resources, has provided theoretical underpinnings to understand the role of place-based communication in multiethnic intergroup relations (Broad et al., 2014). Central to this theory is the notion of a neighborhood storytelling network (STN), a communication system situated in the neighborhood communication environment and sustained by the stories indigenous to the neighborhood. By "storytelling," the theory maintains that neighborhoods are actively constructed by discourse, such as interpersonal conversations, news stories, or organizational narratives (Ball-Rokeach et al., 2001, p. 394). And it is through storytelling, particularly the type of storytelling *about* the neighborhood and *created by* the neighborhood, that a place-based identity might form among its residents (Ball-Rokeach et al., 2001).

Three major components constitute the infrastructure of STN: interpersonal discussion, geo-ethnic media, and community-based organizations. At the micro level, residents become part of the storytelling network through daily conversations and discussions with one another. At the meso level, local media and community-based organizations are two organizational actors that produce and circulate neighborhood-bound stories (Kim & Ball-Rokeach, 2006a, 2006b). The major theoretical assumption of CIT states that when individuals, local media, and community-based organizations are connected and actively producing narratives about the neighborhood, the community is more likely to become integrated (Ball-Rokeach et al., 2001), grow civically engaged (Chen et al., 2013), and achieve better health outcomes (Wilkin, Moran, Ball-Rokeach, Gonzalez, & Kim, 2010). For example, Matsaganis, Golden, and Scott (2014) found that the stories told by residents and community-based organizations helped unite residents and ameliorate reproductive health disparities. On the other hand, when a neighborhood experiences a deficit of storytelling from residents, local media, or community organizations, the community is more likely to suffer from civic apathy or disengagement among its residents (Chen, Dong, Ball-Rokeach, Parks, & Huang, 2012).

Neighborhood interpersonal discussion

The role of interpersonal discussion in promoting civic attitudes and community engagement is well documented (Rojas, 2008; Shah, McLeod, & Yoon, 2001; Wyatt, Katz, & Kim, 2000). Talk or discussion with one's neighbors can transfer relevant neighborhood information, which keeps residents up to date with community affairs and events. For example, Chen and colleagues' (2012) focus group study found that a significant portion of neighborhood discussion dealt with pressing community issues such as crime or safety. Therefore, discussion about the neighborhood is likely to prompt residents to become aware of common issues facing the community, and set the groundwork for further actions taken with other community members.

Unlike talk taking place at a more competitive setting such as the workplace, neighborhood interaction and interpersonal discussion is more likely to nurture positive feelings and trusting relationships among individuals. Stolle, Soroka, and Johnston's (2008) survey study looked at how neighborly interaction mediated the relationship between neighborhood diversity and interpersonal trust. Their finding confirmed that when individuals regularly talked with their neighbors, they were less influenced by the racial and ethnic character of their surrounding neighborhood. In other words, neighborhood interpersonal discussion is likely to help foster common neighborhood identity and attenuate racial or ethnic difference. Therefore, we propose:

H3: Individuals' frequency of neighborhood discussion is positively related to (a) their level of neighborhood belonging, (b) the frequency of intergroup contact, and (c) the perceived quality of intergroup contact.

Downloaded by [University of Houston] at 06:03 05 October 2017

Geo-ethnic media

Regarding geo-ethnic media, we focus on the specific type that targets a specific geographic location and/or specific ethnic groups (Lin & Song, 2006; Matsaganis, Katz, & Ball-Rokeach, 2010). The concept of geo-ethnicity emphasizes the interaction between place and ethnicity. It contends that ethnicity or geographic location alone cannot sufficiently explain the distinctive communication pattern in multiethnic communities (Kim, Jung, & Ball-Rokeach, 2006). Lin and Song (2006) delineate two criteria that mutually define geo-ethnic media. First, the primary stories produced by such media are geographically bound, concerning primarily the issues about the local community. By such a criterion, ethnic media outlets that cover only home society stories are not considered geo-ethnic media. Second, the media must produce ethnically or culturally relevant stories to a particular ethnic group, such as *La Opinión* serving the Spanish-speaking populations, and *Sing Tao Daily* serving Chinese communities, both of which not only target ethnic audiences in native or English languages, but also dedicate content for local reporting. The local orientation of geo-ethnic media enables them to fulfill the community-building function, as local media use can contribute to individuals' development of community ties (Park, 1929) and their perception of the quality of community life (Jeffres & Dobos, 1995). Meanwhile, the ethnic orientation of those media outlets is uniquely equipped to facilitate effective outreach within immigrant and minority residents, to whom mainstream media are often inaccessible or less preferred (Lin & Song, 2006).

By providing locally relevant information and content, geo-ethnic media storytelling facilitates residents' "(re) imagining of the community" and the subsequent formation of neighborhood identity (Anderson, 1991, p. 51). As Chaffee and Mutz (1988) put it, "Media often provide grist for the conversation mill and stimulate informal discussions that might not otherwise take place" (p. 21), which, in the context of promoting intergroup relations, likely creates a shared communicative space and bridges for residents from different racial and ethnic backgrounds (Paluck, 2009).

Another mechanism by which geo-ethnic media may enhance intergroup relations is by providing news content about out-group ethnic members while situating such coverage within the local community. Beaudoin (2011) found that news media, particularly those with strong local foci, fostered both bonding (i.e., intraethnic) and bridging (i.e., interethnic) neighborliness and social capital. When it comes to interethnic interaction, geo-ethnic media

are more likely to provide information and depictions of an ethnic group than traditional mainstream media (Matsaganis et al., 2010). The mediated portrayal of out-group members may supplement direct intergroup interaction, facilitate mutual understanding across individuals from different racial/ethnic groups, and thus "induce feelings of intimacy, similarity, and trust with unlike others" (Beaudoin, 2011, p. 172). Therefore, we hypothesize:

H4: Individuals' connection to geo-ethnic media is positively related to (a) their level of neighborhood belonging, (b) the frequency of intergroup contact, and (c) the perceived quality of intergroup contact.

Local community organizations

Past literature has identified several ways in which local organizations, ranging from civic groups, schools, churches, neighborhood associations to sports and recreational clubs, facilitate the process of community integration: First, community-based organizations help deliver instrumental resources necessary for collective problem solving, such as mobilizing opportunities and civic skills. For example, by providing civic education and connecting members to participation opportunities, Black churches play a central role in African Americans' civic life (Billingsley, 1999). This resource-delivery function is also noteworthy for immigrants and ethnic minorities, where community organizations facilitate the process of cross-cultural adaptation by introducing viable local resources to newcomers (Landolt & Goldring, 2009). Second, locally focused organizations can help foster community attachment and neighborhood identification among residents (Gotham, 1999). A strong sense of community identity, in turn, is key to identifying common ground, thus motivating collective action among residents from diverse backgrounds (Bennett, 1997).

In the context of multiethnic community, while many ethnic and cultural associations may be tasked with specific goals and missions that serve only one ethnic group, the place-based orientation can motivate these organizations to consider the broad community issues, or at least connect the particularized group interest with that of the larger community. Placed-based organizations are more likely to prioritize shared community issues and connect with diverse residents regardless of their ethnic or cultural focus. For example, Korean Immigrant Workers Advocates (KIWA), a historically Korean-serving community organization located in Los Angeles' Koreatown, connects both Asian and Latino residents as the demographics of the community shifted over time (Son, 2012). Those organizations, because of their local orientation, essentially become the hub to connect and mobilize residents around shared issues and interests.

To test the role of place-based organizations, we propose the last hypothesis:

H5: Individuals' connection to local community organizations is positively related to (a) their level of neighborhood belonging, (b) the frequency of intergroup contact, and (c) the perceived quality of intergroup contact.

Method

Survey data and community background

Data for this study were collected from a community survey administered between November 7 and December 17, 2010. The study area is a city located in Northeast Los

Downloaded by [University of Houston] at 06:03 05 October 2017

Angeles County, California, with a population about 84,000 (U.S. Census Bureau, 2012). Latino (34.4%) and Asian (52.9%) populations have outgrown White residents (28.3%) and become the two largest ethnic groups in the city. The study area also represents a type of emerging community with a high percentage of foreign-born populations, where 50.7% of its residents were born outside the United States (compared to the national average of 13.1%, U.S. Census Bureau, 2012). Languages other than English were spoken in 74.9% of households (compared to the national average of 20.9%).

The telephone survey was implemented using random-digit dialing, supplemented by postcard invitation. At the beginning of November 2017, the research team mailed the invitation postcards to addresses without listed landline phone numbers in order to recruit participants who use only cell phones. Among 1,711 eligible community residents contacted, a total of 405 individuals finished the survey, including 319 participants recruited through random-digital dialing, and 86 through postcard invitation. The entire sample consisted of 152 Asians, 154 Latinos, and 99 Anglos, which yielded a response rate of 23.67%. The telephone survey lasted 35 minutes on average and was administrated in participants' preferred language – English, Mandarin, or Spanish. A $20 supermarket gift card was provided as an incentive for participation.

Downloaded by [University of Houston] at 06:03 05 October 2017

Measures

Intergroup interaction quality. Three single-item questions measured the quality of intergroup interaction, which asked how well respondents would rate their interaction with members from Anglo, Asian, and Latino groups on a 10-point scale, with 1 indicating "extremely bad" and 10 indicating "extremely good." This variable was operationalized as an ethnicity-specific measure. For example, if the respondent self-identified as "Anglo," the rating of his or her experience of interaction with Asians and a separate rating of his or her experience of interaction with Latinos respectively measured Anglo–Asian and Anglo–Latino intergroup interaction quality.

Intergroup contact frequency. Three single-item questions measured intergroup contact frequency, which asked respondents the frequency of interactions with members from Anglo, Asian, and Latin groups, on a 5-point scale from "1 = never" to "5 = very often." Similar to the "intergroup interaction quality" measurement, only one of the three questions measured this variable, depending both on respondents' ethnic background and that of the other group.

Neighborhood belonging. Based on existing measures of community attachment, the current study used an eight-item belonging index and asked respondents to indicate subjective feeling towards their neighborhood and objective neighborly behaviors (see Ball-Rokeach et al., 2001 for details about the scale). Specifically, on a 5-point Likert scale, respondents reported on how much they agreed with statements such as "You enjoy meeting and talking with neighbors" (1 = "strongly disagree," 5 = "strongly agree"). For the four objective scales, they provided a number for four questions such as "How many neighbors you know well enough to ask them to keep watch on your house or apartment." The numerical responses were later recoded into five categories (1 = "no neighbors," 2 = "one neighbor," 3 = "two neighbors," 4 = "three neighbors," 5 = "four or more neighbors"). The overall scale reached an acceptable level of Cronbach's alpha at 0.79. The study calculated the final composite by averaging each respondent's score on the

Downloaded by [University of Houston] at 06:03 05 October 2017

eight items ($M = 2.78$, $SD = 1.21$). A number of prior studies have validated this measure using community samples from multiple neighborhoods (e.g., Ball-Rokeach et al., 2001; Chen et al., 2013; Kim & Ball-Rokeach, 2006a), and the instrument was reliable.

Interpersonal neighborhood discussion. The following question, "How often do you have discussions with other people about things happening in your neighborhood," assessed the frequency of interpersonal neighborhood discussion on a 10-point scale, from "1 = never" to "10 = all the time" ($M = 4.39$, $SD = 2.63$). The question specifically measured discussion with other neighbors in the community, not including one's family members.

Connection to local community organizations. The survey asked respondents to name up to two organizations they or their family members belonged to, for each of the following categories: "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." The respondents further identified whether or not the nominated organizations were located within the focal community. For each category, the current study coded any nominations of local organizations as "1," and created an eight-point scale (0 to 7) by adding up each item ($M = 0.85$, $SD = 0.76$).

Connection to geo-ethnic media. The current study used a two-step process to measure residents' connection to geo-ethnic media. First, the survey asked the respondents to nominate the top two ways of staying on top of news in their community, including television, radio, newspapers, and the Internet. Second, respondents further identified whether the nominated media outlets fell under the following three categories: (1) commercial mainstream news sources (e.g., Google News, CNN, New York Times); (2) publicly-funded mainstream media, such as public TV or radio stations (e.g., NPR, KCET- channel 28); (3) geo-ethnic media, including those that produce content specifically for the respondents' ethnic background and cover the residential area (e.g., La Opinión, Patch.com). It should be noted that for media outlets to qualify for the last category, they must target a particular linguistic or ethnic group (including English-speaking Anglos), and the content should be locally oriented. 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" ($M = 0.92$, $SD = 0.76$).

Control variables. Age, income, educational level, and residential tenure were treated as control variables. The average age of the respondents was 53.94 ($SD = 16.4$). In terms of reporting annual household income, respondents selected from one of eight categories ranging from "less than $15,000" to "$100, 000 and more." The response was then transformed into a ratio-level variable through mid-point assignment.[1] Respondents with $100,000 or more household income were recoded as having an annual income of $125,000 ($M = \$ 38{,}818$, $SD = \$ 34{,}711$). Individuals reported their highest level of education by selecting one from seven categories ("1 = middle school or less" to "7 = graduate degree", $M = 3.91$, $SD = 1.72$). Finally, the survey asked respondents to indicate the total years they had lived in the study area ($M = 18.10$, $SD = 11.93$).

Analysis strategy

The analysis employed structural equation modeling (SEM) using LISREL 8.7 to estimate the direct and indirect effects of interpersonal neighborhood discussion, connection to

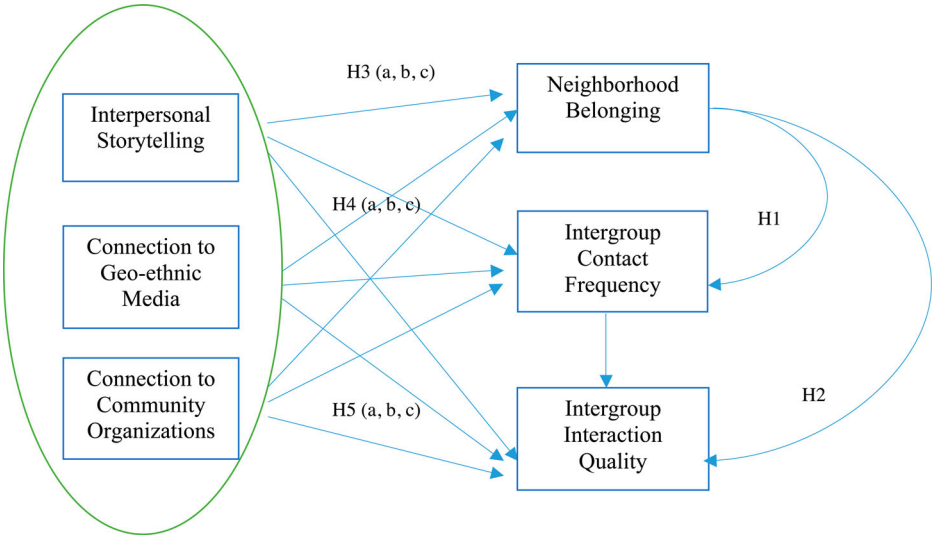

Figure 1. Hypothesized model predicting intergroup contact frequency and interaction quality.

Note: For a clearer presentation, control variables like age and socioeconomic status were not shown in graph, but they were included in model estimation results.

geo-ethnic media, and connection to local community organizations on individual residents' neighborhood belonging, intergroup contact frequency, and intergroup contact quality, with control variables, including individuals' socioeconomic status, education, and residential tenure residualized (see Figure 1). Because the frequency and perceived quality of intergroup contact are ethnicity specific, the same hypothesized model was fit in six dyads of interaction, including: (1) Asian–Anglo interaction perceived by Asians and Anglos respectively; (2) Latino–Anglo interaction as perceived by Latinos and Anglos; and finally (3) Asian–Latino interaction perceived by Asian and Latinos. The significance level for all parameter estimates was set at $p < 0.05$, and Maximum Likelihood was used to produce those estimates.

Each model's goodness-of-fit, that is, the extent to which the hypothesized model fits the observed data, was assessed by the chi-square (χ^2) to degrees-of-freedom ratio (*df*), Bentler-Bonett normed fit index (NFI), the comparative fit index (CFI), and the root-mean-square error of approximation (RMSEA). Generally, a satisfactory model fit would require the χ^2 to *df* ratio lower than 5. The NFI and CFI indices should both reach 0.90 for an acceptable level (Marsh, Balla, & McDonald, 1988). Finally, RMSEA $\leq$ 0.05 would indicate an excellent fit, RMSEA $\leq$ 0.08 a satisfactory fit, RMSEA between 0.08 and 0.10 a fair fit, and RMSEA $\geq$ 0.10 a poor fit (Jöreskog & Sörbom, 1993).

Results

Descriptive comparison of key variables

Table 1 presents descriptive statistics of major variables by ethnicity. ANOVA analysis suggested that Anglo residents ($M_{Anglo} = 64.15$, $SD_{Anglo} = 18.34$) were significantly older than the other two groups ($M_{Asian} = 55.88$, $SD_{Asian} = 16.84$, $M_{Latino} = 52.04$, $SD_{Latino} =$

Downloaded by [University of Houston] at 06:03 05 October 2017

Table 1. Cross-ethnic comparisons of means and standard deviations on major variables.

	Anglos ($N = 99$)		Asians ($N = 152$)		Latinos ($N = 154$)	
	M	*SD*	*M*	*SD*	*M*	*SD*
Residential tenure	27.97	18.59	15.11	8.96	21.05	13.68
Age	64.15	18.34	55.88	16.84	52.04	15.78
Income	49859.37	39407.65	35737.07	34012.82	41859.29	35233.7
Education	4.95	1.53	4.15	1.81	3.68	1.60
Interpersonal discussion	5.25	2.78	3.65	2.35	5.12	2.68
Connection to community organizations	0.83	0.88	0.43	0.67	1.01	1.03
Connection to geo-ethnic media	0.66	0.54	1.12	0.81	0.71	0.64
Neighborhood belonging	2.33	0.78	2.12	0.76	2.31	0.67
Intergroup contact						
With Anglos	3.92	1.11	2.52	1.00	2.87	1.24
With Asians	3.66	1.22	3.81	1.04	2.87	1.28
With Latinos	3.71	1.13	2.70	1.14	3.56	1.19
Intergroup interaction quality						
With Anglos	8.39	1.68	6.91	2.19	7.54	2.09
With Asians	7.20	2.54	7.38	2.02	7.14	2.35
With Latinos	8.09	1.95	6.47	2.31	8.30	1.71

Downloaded by [University of Houston] at 06:03 05 October 2017

15.78, F (2, 402) = 15.74, $p = 0.00$), and they had lived in the neighborhood longest (M_{Anglo} = 27.97, SD_{Anglo} = 18.59, M_{Asian} = 15.11, SD_{Asian} = 8.96; M_{Latino} = 21.05, SD_{Latino} = 13.68, F (2, 402) = 26.89, $p = 0.00$). When comparing residents' socioeconomic background, Latino residents showed the lowest average level of education (M_{Latino} = 3.68, SD_{Latino} = 1.60, M_{Anglo} = 4.95, SD_{Anglo} = 1.53; M_{Asian} = 4.15, SD_{Asian} = 1.81), and such a difference was statistically significant (F (2, 402) = 17.51, $p = 0.00$).

In terms of one's attachment to the neighborhood, Asians were found to have the significantly lowest level of neighborhood belonging (M_{Asian} = 2.12, SD_{Asian} = 0.76, M_{Anglo} = 2.33, SD_{Anglo} = 0.78, M_{Latino} = 2.31, SD_{Latino} = 0.67), which may be attributed to their shorter residential tenure (F (2, 402) = 3.85, $p = 0.02$). The three groups also varied on their connection to place-based communication resources. Specifically, Asian residents showed a significantly higher level of connection to geo-ethnic media (M_{Asian} = 1.12, SD_{Asian} = 0.81, M_{Anglo} = 0.66, SD_{Anglo} = 0.54, M_{Latino} = 0.71, SD_{Latino} = 0.64, F (2, 402) = 18.35, $p = 0.00$), but their average level of connection to local organizations was significantly lower than the other two groups (M_{Asian} = 0.43, SD_{Asian} = 0.67, M_{Anglo} = 0.83, SD_{Anglo} = 0.88, M_{Latino} = 1.01, SD_{Latino} = 1.03, F (2, 402) = 17.41, $p = 0.00$), as was the level of neighborhood discussion (M_{Asian} = 3.65, SD_{Asian} = 2.35, M_{Anglo} = 5.25, SD_{Anglo} = 2.78, M_{Latino} = 5.12, SD_{Anglo} = 2.68, F (2, 402) = 16.63, $p = 0.00$).

When comparing residents' frequency of contact and perceived interaction quality with in-group versus out-group members, a general tendency emerged. Not surprisingly, they interacted more frequently with in-group members and rated the quality of interaction with same-group members higher than with out-group members. Moreover, an ANOVA comparison of different dyads of interaction indicated more nuanced divergence. Specifically, in terms of the intergroup experience with Latinos, Anglo residents rated the quality of interaction with Latinos significantly better than how Asians rated their interaction with Latinos (F (2, 218) = 5.20, $p = 0.024$), but the frequency of intergroup contact with Latinos did not significantly differ between Asians and Anglos. When it came to contact frequency and quality with Asians, Anglo and Latino residents did not show significant differences. Finally, regarding intergroup interaction with Anglos, Asian residents reported to interact with them significantly less frequently than how often Latino residents

reported to (F (2, 300) = 8.09, $p = 0.005$). Meanwhile, the level of perceived interaction quality with Anglos did not significantly differ between Asian or Latino residents.

Hypotheses testing

The full set of hypotheses was tested by fitting the SEM model on six interactional dyads as presented above. For all six models, the chi-square to degree-of-freedom ratio was below the critical value of 5, with NFI, CFI, and RMSEA meeting the acceptable levels (see Table 2). Therefore, the hypothesized model fit the observed data for all six interactional dyads well. Figure 2 identified significant paths among place-based communication variables, neighborhood belonging, intergroup contact frequency, and perceived interaction quality.[2]

Findings from all six interethnic dyads were largely consistent with the prediction of intergroup contact theory. Except for Latino residents and only when it came to their interaction with Anglos, the frequency of intergroup contact was positively and significantly associated with interaction quality for the other five interethnic dyads (see Table 3 through Table 5 for detailed coefficients).

The first two hypotheses tested the relationship between neighborhood belonging and intergroup experience. H1 hypothesized a positive relationship between individuals' neighborhood belonging and the frequency of intergroup contact, and H2 hypothesized that neighborhood belonging was positively related to the perceived quality of intergroup contact. Across all six interactional dyads, H1 was not supported, as neighborhood belonging was not significantly related to the frequency of intergroup contact in any dyads. Meanwhile, H2 was supported in most interactional dyads, except for Anglo–Asian and Anglo–Latino interaction as perceived by Anglo residents. That is, a strong sense of neighborhood belonging was significantly associated with better intergroup interaction quality for Asian and Latino residents, but not from the standpoint of Anglo residents (see Table 3 through Table 5).

H3 tested how neighborhood interpersonal discussion was related to neighborhood belonging and intergroup experience. The inconsistent association between interpersonal discussion and neighborhood belonging was identified (H3a), and the associations between interpersonal discussion and intergroup relations outcomes were largely insignificant across all six interactional dyads (H3b & H3c). Specifically, for Anglo residents, a greater amount of neighborhood interpersonal discussion was significantly related to a stronger sense of neighborhood belonging ($b = 0.41$, $p < 0.01$). For Latino residents, neighborhood interpersonal discussion was significantly related to a higher level of

Table 2. Path model fit statistics for the six interactional dyads.

	χ^2	df	χ^2/df	NFI	CFI	RMSEA
Perceived by Anglo residents						
Anglo–Latino Interaction	16.08	21	.77	.86	1.00	.000
Anglo–Asian Interaction	7.67	21	.37	.94	1.00	.000
Perceived by Latino residents						
Latino–Anglo Interaction	35.54	21	1.69	.84	.98	.025
Latino–Asian Interaction	32.31	21	1.54	.82	.99	.033
Perceived by Asian residents						
Asian–Anglo Interaction	24.61	21	1.17	.86	1.00	.017
Asian–Latino Interaction	32.31	21	1.54	.82	.99	.000

Downloaded by [University of Houston] at 06:03 05 October 2017

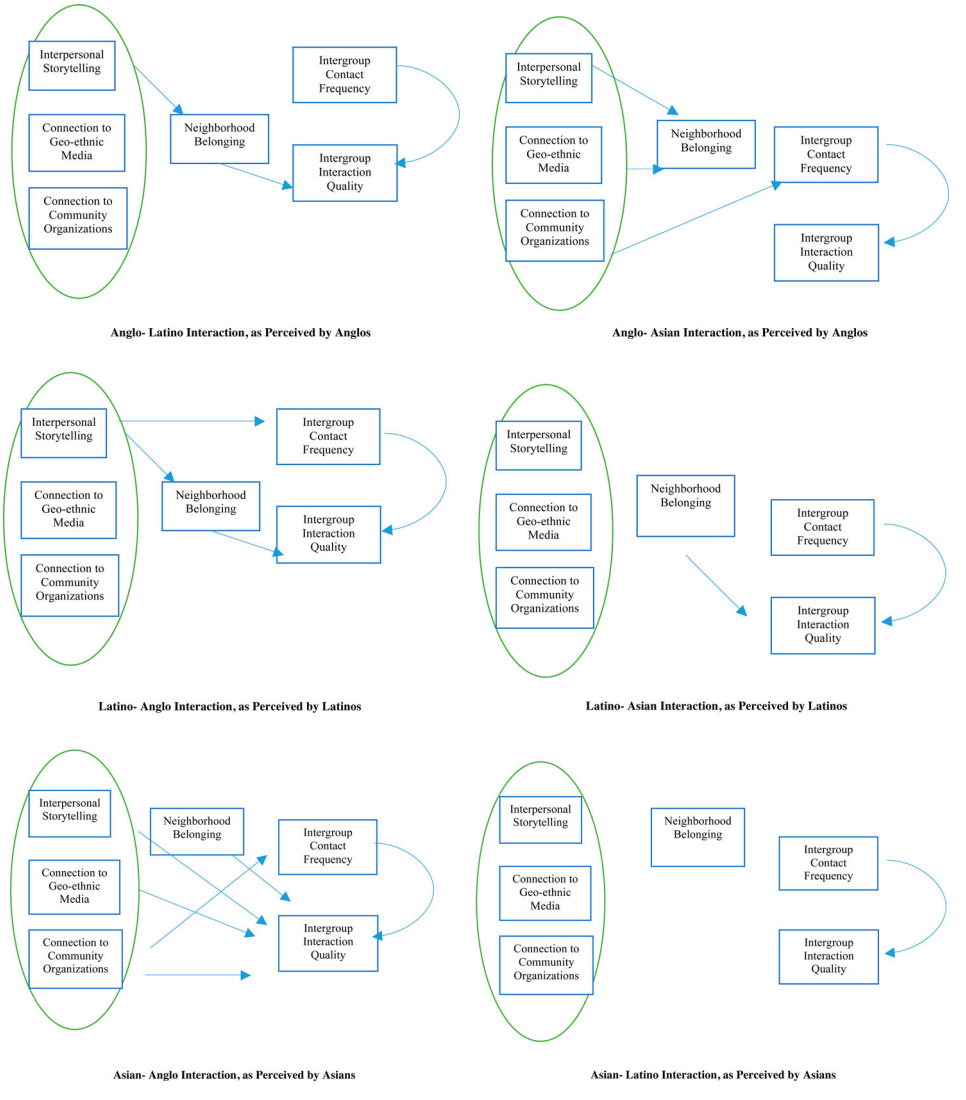

Figure 2. A summary of significant paths identified from the six interactional dyads and hypotheses.

neighborhood belonging ($b = 0.43$, $p < 0.001$), and to more frequent intergroup contact with only Anglo residents ($b = 0.16$, $p < 0.05$) but not with the Asian counterparts. For Asian residents, neighborhood discussion was not significantly related to any intergroup relations outcomes, nor was it significantly associated with neighborhood belonging.

H4 was not supported, as most findings from the six interactional dyads suggested that individuals' connection to geo-ethnic media was not significantly associated with the level of neighborhood belonging (H4a) or intergroup relations outcomes (H4b and H4c). The only significant association between geo-ethnic media and neighborhood belonging was observed in the group of Anglo residents. But contrary to what was predicted, Anglos' connection to geo-ethnic media was actually negatively associated with the level of neighborhood belonging ($b = -0.210$, $p < 0.05$). In terms of the relationship between geo-ethnic

Downloaded by [University of Houston] at 06:03 05 October 2017

Table 3. Path coefficient estimates, standard errors, and significance levels of the hypothesized model, among Anglo–Latino and Anglo–Asian intergroup interaction, as perceived by Anglo residents ($N = 99$).

	Neighborhood Belonging		Intergroup Contact Frequency		Intergroup Contact Quality	
	Estimate *b*	(*SE*)	Estimate *b*	(*SE*)	Estimate *b*	(*SE*)
Anglo-Latino Interaction, Perceived by Anglo residents						
Age	−0.10	0.12	−0.18	0.12	0.02	0.12
Income	0.08	0.10	−0.22	0.10*	0.21	0.11*
Education	−0.10	0.10	−0.09	0.10	−0.02	0.10
Residential tenure	0.14	0.11	−0.02	0.12	0.08	0.12
Interpersonal discussion (H3)	0.39	0.10**	0.15	0.12	0.03	0.12
Connection to geo-ethnic media (H4)	0.13	0.10	0.15	0.10	−0.01	0.10
Connection to community organizations (H5)	0.09	0.09	−0.02	0.10	0.04	0.10
Neighborhood belonging (H1)	–	–	0.09	0.11	−0.08	0.11
Intergroup contact frequency (H2)	–	–	–	–	0.35	0.10**
Anglo–Asian Interaction, Perceived by Anglo Residents						
Age	−0.03	0.11	−0.13	0.12	0.17	0.12
Income	0.04	0.10	0.07	0.10	0.04	0.10
Education	−0.06	0.09	0.05	0.10	0.10	0.10
Residential tenure	0.13	0.11	−0.06	0.12	−0.18	0.12
Interpersonal storytelling	0.41	0.10**	−0.09	0.12	0.10	0.11
Connection to geo-ethnic media	−0.21	0.10*	0.04	0.11	−0.02	0.10
Connection to community organizations	0.08	0.09	0.23	0.10*	−0.04	0.10
Neighborhood belonging	–	–	0.15	0.11	−0.03	0.11
Intergroup contact frequency	–	–	–	–	0.41	0.10**

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Table 4. Path coefficient estimates, standard errors, and significance levels of the hypothesized model, among Latino–Anglo and Latino–Asian intergroup interaction, as perceived by Latino residents ($N = 154$).

	Neighborhood Belonging		Intergroup Contact Frequency		Intergroup Contact Quality	
	Estimate *b*	(*SE*)	Estimate *b*	(*SE*)	Estimate *b*	(*SE*)
Latino–Anglo Interaction, Perceived by Latino residents						
Age	−0.14	0.08	0.03	0.08	0.24	0.09*
Income	−0.03	0.07	0.23	0.07	−0.01	0.08
Education	−0.10	0.07	−0.04	0.07	−0.23	0.08**
Residential tenure	0.10	0.08	0.11	0.08	−0.12	0.08
Interpersonal discussion (H3)	0.43	0.08***	0.36	0.08**	−0.01	0.09
Connection to geo-ethnic media (H4)	0.06	0.07	−0.11	0.07	−0.02	0.08
Connection to community organizations (H5)	0.12	0.07	−0.03	0.07	0.02	0.08
Neighborhood belonging (H1)	–	–	0.16	0.08*	0.26	0.08*
Intergroup contact frequency (H2)	–	–	–	–	0.13	0.09
Latino–Asian Interaction, Perceived by Latino Residents						
Age	−0.05	0.10	−0.18	0.09*	−0.05	0.08
Income	−0.03	0.08	−0.07	0.08	0.29	0.07
Education	−0.15	0.08	−0.13	0.08	−0.05	0.08
Residential tenure	0.12	0.09	0.20	0.08**	−0.13	0.08
Interpersonal storytelling	0.02	0.08	−0.05	0.08	−0.11	0.08
Connection to geo-ethnic media	−0.01	0.09	−0.13	0.09	0.00	0.08
Connection to community organizations	0.11	0.09	0.07	0.08	0.12	0.08
Neighborhood belonging	–	–	0.11	0.08	0.20	0.07**
Intergroup contact frequency	–	–			0.22	0.08**

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Downloaded by [University of Houston] at 06:03 05 October 2017

Table 5. Path coefficient estimates, standard errors, and significance levels of the hypothesized model, among Asian–Anglo and Asian–Latino intergroup interaction, as perceived by Asian residents (N = 152).

	Neighborhood Belonging		Intergroup Contact Frequency		Intergroup Contact Quality	
	Estimate *b*	(*SE*)	Estimate *b*	(*SE*)	Estimate *b*	(*SE*)
Asian–Anglo Interaction, Perceived by Asian residents						
Age	−0.05	0.10	0.07	0.09	−0.14	0.08
Income	−0.03	0.08	−0.05	0.08	0.23	0.07**
Education	−0.15	0.08	−0.13	0.08	−0.10	0.07
Residential tenure	0.12	0.09	0.11	0.08	−0.08	0.07
Interpersonal discussion (H3)	0.02	0.08	0.01	0.09	0.08	0.07
Connection to geo-ethnic media (H4)	−0.01	0.10	−0.17	0.09	0.41	0.08***
Connection to community organizations (H5)	0.11	0.09	0.20	0.08*	0.29	0.07***
Neighborhood belonging (H1)	–	–	0.06	0.08	0.20	0.07**
Intergroup contact frequency (H2)	–	–	–	–	0.28	0.07**
Asian–Latino Interaction, Perceived by Asian Residents						
Age	−0.05	0.10	−0.18	0.09	−0.05	0.09
Income	−0.03	0.08	−0.07	0.08	0.29	0.07**
Education	−0.15	0.08	−0.13	0.08	−0.05	0.08
Residential tenure	0.12	0.09	0.20	0.08*	−0.13	0.08
Interpersonal storytelling	0.02	0.08	−0.05	0.08	0.00	0.07
Connection to geo-ethnic media	−0.01	0.10	−0.13	0.09	−0.11	0.08
Connection to community organizations	0.11	0.09	0.07	0.08	0.12	0.08
Neighborhood belonging	–	–	0.11	0.08	0.20	0.07**
Intergroup contact frequency	–	–			0.22	0.08**

*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

media and intergroup relations, significant association only emerged within the group of Asian residents, but limited to Asians' intergroup interaction with Anglos ($b = 0.41$, $p < 0.001$). That is, the more Asian residents were connected to geo-ethnic media, the better they would rate their interaction with Anglo residents, but not with Latino residents.

Finally, the models produced mixed results regarding how local organizational connection was related to multiethnic intergroup communication (H5b and H5c). For Anglo residents, a greater amount of organizational engagement was significantly associated with more frequent contact with Asian residents ($b = 0.\ 23$, $p < 0.05$), but a similar association was not observed for Anglo–Latino interaction. For Asian residents, their connection with community-based organizations was positively and significantly related to the intergroup contact frequency ($b = 0.\ 20$, $p < 0.05$) and interaction quality ($b = 0.\ 29$, $p < 0.001$) with Anglo residents. But those significant relationships did not hold for Asian–Latino interaction. Finally, for Latino residents, their connection to local organizations was not significantly associated with either neighborhood belonging or intergroup interaction outcomes.

Discussion

The path analysis showed a number of important findings. First, the association between neighborhood belonging and better intergroup relations is only partially supported. Specifically, for Asian and Latino residents, higher neighborhood belonging indeed translated into better intergroup interaction quality. Meanwhile, neighborhood belonging did not significantly improve Anglo residents' interaction experience with Asians or Latinos. Second, our findings suggest that the extent to which place-based communication can facilitate intergroup communication not only differs across different interethnic

Downloaded by [University of Houston] at 06:03 05 October 2017

dyads, but is contingent on specific communication processes. Each component of the local communication processes – neighborhood discussion, geo-ethnic media, and local community organizations – demonstrate varying degrees of capacity in promoting intergroup relations in a multiethnic community context.

Neighborhood belonging as a bridging mechanism

The finding that neighborhood belonging was not positively associated with intergroup experience across all three ethnic groups is worth discussing. These differences can be interpreted in the context of the changing demographic composition and complex intergroup dynamics of the study site. Our results suggest that the extent to which neighborhood belonging relates to positive intergroup perception differs substantially between long-term (i.e., Anglo residents) and recent residents (i.e., Latino and Asian residents). Over the past few decades, this community has experienced a significant demographic shift with an influx of immigrants and ethnic minorities. Asians and Latinos are now the two largest ethnic groups in what used to be a historically Anglo community – Census data documents that from 2000 to 2010, there was a persistent increase of Asian population from 47.2% of its total population to 52.9%, whereas the percentage of Anglo residents dropped from 30% to 28.3% (U.S. Census Bureau, 2012).

The shift to a majority-minority community may be an alienating experience or even a source of intergroup threat for the long-time Anglo residents (Stephan & Mealy, 2011). In other words, a strong sense of ownership of the neighborhood may not always translate into positive intergroup perceptions for every ethnic group. And even in the face of intergroup contact opportunities, it is possible that old-time residents and newcomers enter into the contact situation with different expectations and motivations (Brewer, 1997). The unique community-level dynamics may provide some insights into why neighborhood belonging would positively associate with Asians and Latinos' intergroup perceptions, but not for Anglo residents.

Another possible explanation to be explored in future research is how residents may imagine community differently (Anderson, 1991). Residents from diverse backgrounds may not always share the same sense of neighborhood community, or whom they consider to be a part (or *not* be a part) of that community. In the current study, although we asked residents to report their subjective and objective attachment to the neighborhood, questions like "how do you conceive your neighborhood" and "whom do you consider as your neighbors" may help further illuminate whether diverse residents are imagining the same kind of neighborhood. It is likely that residents in our study were attached to an ethnically bounded community. For example, the notion of community imagined by Anglo residents with longer residential tenure may consist exclusively of other in-group members. For the Latino and Asian residents who tended to be younger and newcomers, their notion of community may be more flexible and better correspond to the demographic and cultural change they themselves are bringing to the neighborhood.

Implications for intergroup contact theory

Intergroup contact theory posits that depending on the situation, more intergroup contact does not always lead to decreased prejudice (Pettigrew & Tropp, 2006). Findings from the

Downloaded by [University of Houston] at 06:03 05 October 2017

current study are largely consistent with this proposition. Specifically, we found that although more intergroup contact was significantly related to better interaction quality in most interethnic dyads, it was not the case for Latino–Anglo contact as perceived by Latino residents. Our findings imply that a neighborhood's demographic composition is an important contextual factor to consider. The significance of majority-minority dynamics on the nature of intergroup contact has been noted by others (e.g., Brewer, 1997; Wright & Lubensky, 2009). In some cases, contact may lead to minorities gaining a heightened sense of being "unjustly deprived" relative to their out-group counterparts (Pettigrew et al., 2011, p. 278). Along this line, Dixon and Durrheim's (2003) study in South Africa showed that Blacks' contact with upper-status Whites actually led to less sympathy from Blacks for Whites.

In addition, residents' cultural or ethnic identity could be an important mediating factor for future intergroup contact research to explore. Social identity theorists have long noted the intricate relationship between ethnic identity and intergroup relations (Dovidio et al., 2003; Tajfel, 2010). Although salient identification with one's ethnic background may create alienating feelings towards out-group members, scholars also point out the dynamic process of "recategorization" (Dovidio et al., 2003, p. 11) – that is, residents' group identity may shift from the exclusive identification with only one ethnic group to a more inclusive membership perception, which in turn, helps reduce intergroup bias and conflict. Findings from our current study suggest that the "recategorization" process may already take place in the community under study, and neighborhood belonging could be an important catalyst to help form place-based identity among diverse residents. Future research is encouraged to explicate the role of ethnic identity in the formation of place-based identity, as well as the dynamic process along which those two forms of identity intersect and co-evolve.

Last but not least, much of existing intergroup contact research focuses on Black and White populations in the United States (Broad et al., 2014). This pattern, primarily driven by socio-historical concerns regarding Black and White relations in the United States, does not fully capture the demographic contours of contemporary urban communities – that is, the rapid increase of Asian and Hispanic migration after the second wave of immigration (Bischoff, 2002; Pew Hispanic Center, 2013), and increasingly common scenes of Asians and Hispanics living side-by-side in cities and neighborhoods in the United States (Cheng, 2013; Trinidad, 2013). As relatively few studies have looked at how multiple ethnic groups interact in the same neighborhood (a few exceptions, e.g., Greif, 2009; Oliver & Wong, 2003), our current study contributes to multiethnic intergroup communication research by comparing the interaction patterns across six dyadic groups (i.e., Anglos–Latinos, Latinos–Asians, Latinos–Anglos, Asians–Anglos, Asians–Latinos).

The role of place-based communication resources

The CIT approach introduces an ecological framework to examine the extent to which place-based resources, namely interpersonal discussion, geo-ethnic media, and community-based organizations, connect residents from diverse backgrounds. Neighborhood interpersonal discussion, an important form of intergroup contact (Pettigrew & Tropp, 2006), was only positive in predicting Latino residents' intergroup interaction frequency

Downloaded by [University of Houston] at 06:03 05 October 2017

with Anglo residents. In terms of forging a sense of neighborhood belonging, interpersonal discussion played a significant role for both Anglo and Latino residents. However, such positive relationships only further translated into more frequent intergroup contact within the group of Latinos, and only when they interacted with Anglos. On the other hand, although greater neighborhood discussion stimulated a stronger sense of belonging for Anglos, it did not prompt them to make more frequent contact with other Latino or Asian residents in the community. This may be due to Anglos talking with other Anglo neighbors and becoming attached to the idea of a neighborhood consisting of other Anglo and longer-tenure residents. Language barriers and immigration status might also explain differences in the degree to which interpersonal discussion facilitates intergroup relations. New immigrants, such as Asians in the community under study, are likely to be excluded or self-withdrawn from neighborhood discussion, and so are residents who speak no or little English. While relevant factors such as acculturation or language proficiency are not explored in the current study, future research in this direction is highly encouraged.

The role of geo-ethnic media is particularly worth noting. It turns out to be the local communication process with the weakest association with neighborhood belonging, and it is even negatively associated with Asian–Latino intergroup interaction. Geo-ethnic media as a source of local information can facilitate residents' engagement in local community life and strengthen their attachment to the community (McLeod et al., 1996). At the same time, others have pointed out that the local orientation of geo-ethnic media is not a given. For instance, the content of geo-ethnic media has been found to focus on events and issues in the home country of immigrant population (Lin & Song, 2006), which makes these media outlets less effective in helping newcomers to bond with other members of the community.

In addition, the ways in which out-group members are portrayed in geo-ethnic media could affect residents' intergroup perception and their subsequent interaction (Beaudoin, 2011; Beaudoin & Thorson, 2006). Broad et al. (2014) pointed to the need to investigate the nature of stories circulated in geo-ethnic media sources. Their study showed that respondents' integration into the storytelling network did not always lead to positive intergroup outcomes – for example, when the media portray negative stories about other groups, residents' media connection actually lowers the quality of intergroup interaction (Broad et al., 2014). Analysis of the content of geo-ethnic media, especially stories about out-group members, may further illuminate how residents' connection to geo-ethnic media affects the development of intergroup relations.

Finally, the findings point to the complex associations between residents' community organizations' connection and intergroup relations. For the Anglo–Asian interethnic dyad, residents' connection to community organizations increases both parties' intergroup contact frequency, whereas the same effect is not observed for either group's interaction with Latino residents. This finding has implications for the development of community organizations' bridging capacity. As opposed to the notion of bonding, which emphasizes solidarity and in-group identity among members from the same background (Matsaganis, 2008; Putnam, 2002), community organizations' ability to engage members from different social cleavages has become an increasingly important issue given the rise of diverse communities. Findings from the current study suggest that community organizations of various kinds, depending on their missions, clientele bases, or the nature of service

Downloaded by [University of Houston] at 06:03 05 October 2017

provided, may vary considerably in their capacity to engage diverse residents and promote better intergroup relationships. Along this line, future research is encouraged to develop a more systematic way of assessing community organizations' bridging capacity, and more importantly, how such capacity may be related to intergroup relations outcomes.

Limitations of the study

There are several limitations in the current study. The first deals with the relatively small sample size for each ethnic group. Although there is no consensus on the recommended sample size for SEM, a sample over 200 is generally desired in order to provide sufficient statistical power (Hoelter, 1983). The current sample size for the three ethnic groups ranges from 99 to 154. On a related note, as structural equation modeling is not best equipped to make causal claims (Bollen & Pearl, 2013), one should be careful to not interpret any significant paths as causal relationships. For example, although we observed that neighborhood belonging positively contributed to intergroup interaction, it is less certain whether the flow of influence can go the other way, or there exist reciprocal influences between the two sets of variables. Future studies are encouraged to test alternative theoretical models to find out.

Second, we take established scales to measure residents' connection to neighborhood storytelling networks (Kim et al., 2011; Kim & Ball-Rokeach, 2006a). These measures indicate well the level of connection established between individuals and the storytelling variables. However, they do not necessarily distinguish the content- or the organizational-level differences among individual media outlets and community organizations.

As mentioned, the content of geo-ethnic media can be further examined, and distinctions may be made between media that provide favorable out-group coverage versus those that have little, or negative coverage. Similarly, the bridging potential of community organizations can be more systematically assessed. In the current study, organizations of different functional types, such as sports or recreational groups, religious groups, and political groups, were not further delineated. In the context of intergroup communication, however, it is entirely possible that certain organizational types are more successful to connect multiethnic residents than others. For example, neighborhood associations with a more inclusive vision of community goods and those that actively engage diverse residents may play a more instrumental role in fostering neighborhood belonging and better intergroup relationships.

Amid the rise of multiethnic and multicultural communities, healthy intergroup dynamics bear critical importance for achieving community integration. They matter for whether and to what extent the imagined community can be forged across residents from diverse backgrounds (Anderson, 1991; Rothenbuhler, 1991), which, in turn, has consequences for how community-level collective actions can be effectively marshaled across racial and ethnic divide.

Notes

1. Mid-point assignment is a standard procedure to generate a continuous measure of household income by allocating the midpoint income of their selected income category (Kaufman, Long, Liao, Cooper, & McGee, 1998). For example, if an respondent reported household

Downloaded by [University of Houston] at 06:03 05 October 2017

income falling under the category of "15,000 to less than 20,000 dollars," it was computed as 17,500 in the data set.
2. Control variables, including age, income, education, and residential tenure, are not shown in the graph for clearer presentation, but they were included in model estimation.

Acknowledgement

We would like to acknowledge support received on data collection from Professor Michael Parks, Dr. Nien-Tsu Nancy Chen, Dr. Katherine Ognyanova, Evelyn Moreno, and Daniela Gerson.

We are grateful for the constructive comments from the editor and three anonymous reviewers at the *Journal of International and Intercultural Communication*.

Funding

We gracefully acknowledge financial support and intellectual contributions to this article from the Metamorphosis Project (http://www.metamorph.org/) and Annenberg Foundation at the Annenberg School for Communication and Journalism, University of Southern California.

Downloaded by [University of Houston] at 06:03 05 October 2017

References

Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.

Anderson, B. (1991). *Imagined communities: Reflections on the origin and spread of nationalism*. New York: Verso Books.

Ball-Rokeach, S. J., Kim, Y.-C., & Matei, S. (2001). Storytelling neighborhood: Paths to belonging in diverse urban environments. *Communication Research*, *28*, 392–428. doi:10.1177/009365001028004003

Beaudoin, C. E. (2011). News effects on bonding and bridging social capital: An empirical study relevant to ethnicity in the United States. *Communication Research*, *38*, 155–178. doi:10.1177/0093650210381598

Beaudoin, C. E., & Thorson, E. (2006). The social capital of Blacks and Whites: Differing effects of the mass media in the United States. *Human Communication Research*, *32*(2), 157–177. doi:10.1111/j.1468-2958.2006.00007.x

Bennett, L. (1997). *Neighborhood politics: Chicago and Sheffield*. New York: Garland Publishing, Inc.

Billingsley, A. (1999). *Mighty like a river: The black church and social reform*. New York: Oxford University Press.

Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., … Leyens, J.-P. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology*, *96*, 843–856. doi:10.1037/a0013470

Bischoff, H. (2002). *Immigration issues*. Westport, CT: Greenwood Press.

Bollen, K. A., & Pearl, J. (2013). Eight myths about causality and structural equation models. In S. L. Morgan (Ed.), *Handbook of causal analysis for social research* (pp. 301–328). New York: Springer.

Brewer, M. B. (1997). The social psychology of intergroup relations: Can research inform practice? *Journal of Social Issues*, *53*, 197–211. doi:10.1111/j.1540-4560.1997.tb02440.x

Broad, G. M., Gonzalez, C., & Ball-Rokeach, S. J. (2014). Intergroup relations in South Los Angeles – Combining communication infrastructure and contact hypothesis approaches. *International Journal of Intercultural Relations*, *38*, 47–59. doi:10.1016/j.ijintrel.2013.06.001

Brown, B., Perkins, D. D., & Brown, G. (2003). Place attachment in a revitalizing neighborhood: Individual and block levels of analysis. *Journal of Environmental Psychology*, *23*, 259–271. doi:10.1016/S0272-4944(02)00117-2

Chaffee, S. H., & Mutz, D. C. (1988). Comparing mediated and interpersonal communication data. In R. P. Hawkins, J. M. Wiemann, & S. Pingree (Eds.), *Advancing communication science: Merging mass and interpersonal processes* (pp. 19–43). Newbury Park, CA: Sage.

Chen, N.-T. N., Dong, F., Ball-Rokeach, S. J., Parks, M., & Huang, J. (2012). Building a new media platform for local storytelling and civic engagement in ethnically diverse neighborhoods. *New Media & Society*, *14*, 931–950. doi:10.1177/1461444811435640

Chen, N.-T. N., Ognyanova, K., Zhao, N., Liu, W., Gerson, D., Ball-Rokeach, S., & Parks, M. (2013). Communication and socio-demographic forces shaping civic engagement patterns in a multiethnic city. In P. Moy (Ed.), *Communication and community* (pp. 207–232). New York: Hampton Press.

Cheng, W. (2013). *The Changs next door to the Diazes: Remapping race in suburban California*. Minneapolis: University of Minnesota Press.

Cohen, J. L. (1985). Strategy or identity: New theoretical paradigms and contemporary social movements. *Social Research*, *52*, 663–716.

Dixon, J., & Durrheim, K. (2003). Contact and the ecology of racial division: Some varieties of informal segregation. *The British Journal of Social Psychology*, *42*, 1–23. doi:10.1348/014466603763276090

Dixon, J., Durrheim, K., Tredoux, C., Tropp, L., Clack, B., & Eaton, L. (2010). A paradox of integration? Interracial contact, prejudice reduction, and perceptions of racial discrimination. *Journal of Social Issues*, *66*, 401–416. doi:10.1111/j.1540-4560.2010.01652.x

Dovidio, J. F., Gaertner, S. L., & Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes & Intergroup Relations*, *6*(1), 5–21. doi:10.1177/1368430203006001009

Friedland, L. A. (2001). Communication, community, and democracy: Toward a theory of the communicatively integrated community. *Communication Research*, *28*, 358–391. doi:10.1177/009365001028004002

Georgiou, M. (2013). *Media and the city: Cosmopolitanism and difference*. Cambridge, MA: Polity.

Gotham, K. F. (1999). Political opportunity, community identity, and the emergence of a local anti-expressway movement. *Social Problems*, *46*, 332–354. doi:10.2307/3097104

Greif, M. J. (2009). Neighborhood attachment in the multiethnic metropolis. *City & Community*, *8*, 27–45. doi:10.1111/j.1540-6040.2009.01268.x

Hays, R. A., & Kogl, A. M. (2007). Neighborhood attachment, social capital building, and political participation: A case study of low- and moderate-income residents of Waterloo, Iowa. *Journal of Urban Affairs*, *29*, 181–205. doi:10.1111/j.1467-9906.2007.00333.x

Hoelter, J. W. (1983). The analysis of covariance structures goodness-of-fit indices. *Sociological Methods & Research*, *11*(3), 325–344. doi:10.1177/0049124183011003003

Jeffres, L. W., & Dobos, J. (1995). Separating people's satisfaction with life and public perceptions of the quality of life in the environment. *Social Indicators Research*, *34*, 181–211.

Johnson, J. H. Jr., & Oliver, M. L. (1989). Interethnic minority conflict in urban America: The effects of economic and social dislocations. *Urban Geography*, *10*, 449–463. doi:10.2747/0272-3638.10.5.449

Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Chicago, IL: Scientific Software International.

Kaufman, J. S., Long, A. E., Liao, Y., Cooper, R. S., & McGee, D. L. (1998). The relation between income and mortality in US blacks and whites. *Epidemiology*, *9*, 147–155.

Kim, Y.-C., & Ball-Rokeach, S. J. (2006a). Civic engagement from a communication infrastructure perspective. *Communication Theory*, *16*, 173–197. doi:10.1111/j.1468-2885.2006.00267.x

Kim, Y.-C., & Ball-Rokeach, S. J. (2006b). Community storytelling network, neighborhood context, and civic engagement: A multilevel approach. *Human Communication Research*, *32*, 411–439. doi:10.1111/j.1468-2958.2006.00282.x

Kim, Y. C., Jung, J. Y., & Ball-Rokeach, S. J. (2006). "Geo-ethnicity" and neighborhood engagement: A communication infrastructure perspective. *Political Communication*, *23*(4), 421–441. doi:10.1080/10584600600976997

Kim, Y.-C., Moran, M. B., Wilkin, H. A., & Ball-Rokeach, S. J. (2011). Integrated connection to a neighborhood storytelling network (ICSN), education, and chronic disease knowledge among

Downloaded by [University of Houston] at 06:03 05 October 2017

African Americans and Latinos in Los Angeles. *Journal of Health Communication*, *16*, 393–415. doi:10.1080/10810730.2010.546483

Landolt, P., & Goldring, L. (2009). Immigrant political socialization as bridging and boundary work: Mapping the multi-layered incorporation of Latin American immigrants in Toronto. *Ethnic and Racial Studies*, *32*, 1226–1247. doi:10.1080/01419870802604016

Lin, W.-Y., & Song, H. (2006). Geo-ethnic storytelling: An examination of ethnic media content in contemporary immigrant communities. *Journalism*, *7*, 362–388. doi:10.1177/1464884906065518

Manzo, L. C., & Perkins, D. D. (2006). Finding common ground: The importance of place attachment to community participation and planning. *Journal of Planning Literature*, *20*, 335–350. doi:10.1177/0885412205286160

Marsh, H. W., Balla, J. R., & McDonald, R. P. (1988). Goodness of fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin*, *103*, 391–410. doi:10.1037/0033-2909.103.3.391

Massey, D. S. (2010). Immigration statistics for the twenty-first century. *The Annals of the American Academy of Political and Social Science*, *631*, 124–140. doi:10.1177/0002716210373329

Matsaganis, M. D. (2008). *Rediscovering the communication engine of neighborhood effects: How the interaction of residents and community institutions impacts health literacy and how it can be leveraged to improve health care access* (*Unpublished doctoral dissertation*). University of Southern California.

Matsaganis, M. D., Golden, A. G., & Scott, M. E. (2014). Communication infrastructure theory and reproductive health disparities: Enhancing storytelling network integration by developing interstitial actors. *International Journal of Communication*, *8*, 1495–1515.

Matsaganis, M. D., Katz, V. S., & Ball-Rokeach, S. J. (2010). *Understanding ethnic media: Producers, consumers, and societies*. Thousand Oaks: Sage.

Matsaganis, M. D., & Wilkin, H. A. (2015). Communicative social capital and collective efficacy as determinants of access to health-enhancing resources in residential communities. *Journal of Health Communication*, *20*, 377–386. doi:10.1080/10810730.2014.927037

McLeod, J. M., Daily, K., Guo, Z., Eveland, W. P., Bayer, J., Yang, S., & Wang, H. (1996). Community integration, local media use, and democratic processes. *Communication Research*, *23*, 179–209. doi:10.1177/009365096023002002

McLeod, J. M., Scheufele, D. A., & Moy, P. (1999). Community, communication, and participation: The role of mass media and interpersonal discussion in local political participation. *Political Communication*, *16*, 315–336. doi:10.1080/105846099198659

Nagda, B. A. (2006). Breaking barriers, crossing borders, building bridges: Communication processes in intergroup dialogues. *Journal of Social Issues*, *62*, 553–576. doi:10.1111/j.1540-4560.2006.00473.x

Ognyanova, K., Chen, N.-T., Ball-Rokeach, S. J., An, Z., Son, M., Parks, M., & Gerson, D. (2013). Online participation in a community context: Civic engagement and connections to local communication resources. *International Journal of Communication*, *7*, 2433–2456.

Oliver, J. E., & Wong, J. (2003). Intergroup prejudice in multiethnic settings. *American Journal of Political Science*, *47*, 567–582. doi:10.1111/1540-5907.00040

Paluck, E. L. (2009). Reducing intergroup prejudice and conflict using the media: A field experiment in Rwanda. *Journal of Personality and Social Psychology*, *96*, 574–587. doi:10.1037/a0011989

Park, R. (1929). Urbanization as measured by newspaper circulation. *American Journal of Sociology*, *35*, 60–79.

Pettigrew, T. F. (2008). Future directions for intergroup contact theory and research. *International Journal of Intercultural Relations*, *32*, 187–199. doi:10.1016/j.ijintrel.2007.12.002

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*, 751–783. doi:10.1037/0022-3514.90.5.751

Pettigrew, T. F., Tropp, L. R., Wagner, U., & Christ, O. (2011). Recent advances in intergroup contact theory. *International Journal of Intercultural Relations*, *35*, 271–280. doi:10.1016/j.ijintrel.2011.03.001

Downloaded by [University of Houston] at 06:03 05 October 2017

Pew Hispanic Center. (2013). *Statistical portrait of the foreign-born population in the United States*, 2011. Retrieved from http://www.pewhispanic.org/2013/01/29/statistical-portrait-of-the-foreign-born-population-in-the-united-states-2011/#8

Pretty, G. H., Chipuer, H. M., & Bramston, P. (2003). Sense of place amongst adolescents and adults in two rural Australian towns: The discriminating features of place attachment, sense of community and place dependence in relation to place identity. *Journal of Environmental Psychology*, *23*, 273–287. doi:10.1016/S0272-4944(02)00079-8

Putnam, R. D. (2002). *Democracies in flux: The evolution of social capital in contemporary society*. New York: Oxford University Press.

Reese-Cassal, K. (2014). 2014/2019 Esri diversity index [White paper]. Retrieved October 9, 2016, from https://www.esri.com/library/whitepapers/pdfs/diversity-index-methodology.pdf

Rojas, H. (2008). Strategy versus understanding how orientations toward political conversation influence political engagement. *Communication Research*, *35*, 452–480. doi:10.1177/0093650208315977

Rothenbuhler, E. W. (1991). The process of community involvement. *Communication Monographs*, *58*, 63–78. doi:10.1080/03637759109376214

Schubert, K., Weibert, A., & Wulf, V. (2011). Locating computer clubs in multicultural neighborhoods: How collaborative project work fosters integration processes. *International Journal of Human-Computer Studies*, *69*, 669–678. doi:10.1016/j.ijhcs.2010.12.007

Shah, D. V., McLeod, J. M., & Yoon, S. H. (2001). Communication, context, and community: An exploration of print, broadcast, and Internet influences. *Communication Research*, *28*, 464–506. doi:10.1177/009365001028004005

Son, M. (2012). *Uncovering the opportunities for Korean-Latino intergroup communication in Los Angeles' Koreatown through community-based collaborative research*. Paper presented at the annual conference of the International Communication Association, Phoenix, Arizona.

Stamm, K. (1985). *Newspaper use and community ties*. Westport, CT: Ablex.

Stephan, W. G., & Mealy, M. D. (2011). Intergroup threat theory. In D. J. Christie (Ed.), *The encyclopedia of peace psychology*. Malden, MA: Blackwell.

Stolle, D., Soroka, S., & Johnston, R. (2008). When does diversity erode trust? Neighborhood diversity, interpersonal trust and the mediating effect of social interactions. *Political Studies*, *56*, 57–75. doi:10.1111/j.1467-9248.2007.00717.x

Tajfel, H. (2010). *Social identity and intergroup relations*. New York: Cambridge University Press.

Trinidad, E. (2013). A tale of two communities: Asians and Latinos and the Future of LA. KCET. Retrieved from http://www.kcet.org/updaily/socal_focus/commentary/transpacific-routes/a-tale-of-two-communities-asians-and-latinos-and-the-future-la.html

US Census Bureau. (2012). *American fact finder*. Accessed February 7, 2014, from http://factfinder2.census.gov/main.html

Uslaner, E. M., & Conley, R. S. (2003). Civic engagement and particularized trust: The ties that bind people to their ethnic communities. *American Politics Research*, *31*(4), 331–360. doi:10.1177/1532673X03031004001

Welch, S., Sigelman, L., Bledsoe, T., & Combs, M. (2001). *Race and place: Race relations in an American city*. Cambridge: Cambridge University Press.

Wilkin, H. A., Moran, M. B., Ball-Rokeach, S. J., Gonzalez, C., & Kim, Y. C. (2010). Applications of communication infrastructure theory. *Health Communication*, *25*(6-7), 611–612. doi:10.1080/10410236.2010.496839

Wright, S. C., & Lubensky, M. E. (2009). The struggle for social equality: Collective action versus prejudice reduction. In S. Demoulin, J-P. Leyens, & J. F. Dovidio (Eds.), *Intergroup misunderstandings: Impact of divergent social realities* (pp. 291–310). New York: Psychology Press.

Wyatt, R. O., Katz, E., & Kim, J. (2000). Bridging the spheres: Political and personal conversation in public and private spaces. *Journal of Communication*, *50*, 71–92. doi:10.1111/j.1460-2466.2000.tb02834.x

Downloaded by [University of Houston] at 06:03 05 October 2017